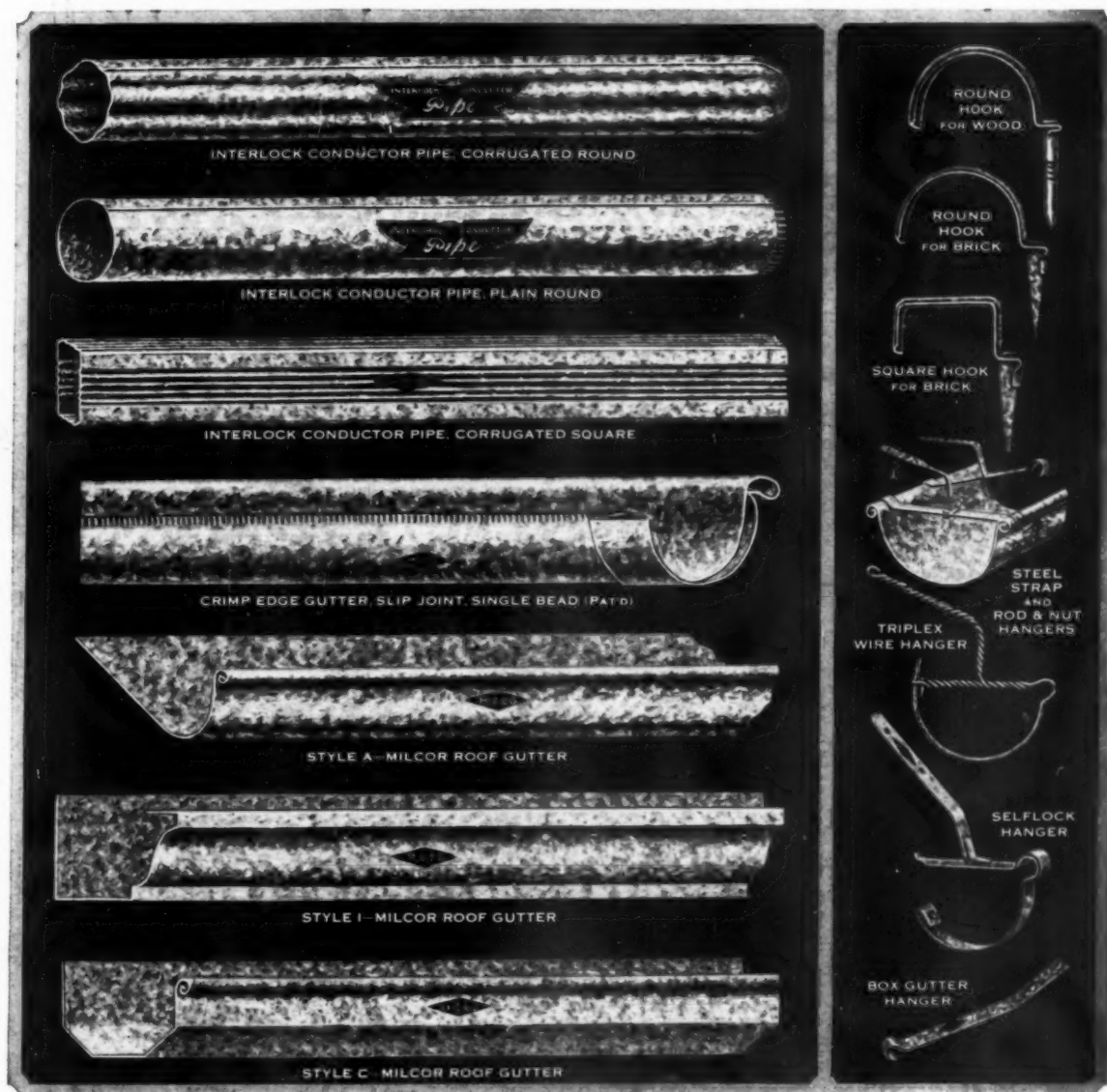


# AMERICAN ARTISAN and Hardware Record

Vol. 87. No. 17. 620 SOUTH MICHIGAN AVENUE, CHICAGO, APRIL 26, 1924. \$2.00 Per Year



Largest Manufacturers in U. S. A. of Eaves Trough, Conductor Pipe and Trimmings—Annual Capacity 50 Million Feet.

**MILWAUKEE CORRUGATING COMPANY**

MILWAUKEE KANSAS CITY LA CROSSE MINNEAPOLIS

Your Trade Appreciates Milcor Quality. Write for Prices and Details.

*MILCOR*

## RAIN-CARRYING EQUIPMENT

# *The one proven* **OIL-BURNING FURNACE**

## *The WEIR* *Steel Furnace*

WITH the ever-increasing popularity of oil burning, there is a demand for a satisfactory oil-burning furnace, and the Weir furnace supplies this demand. (Particularly for the mechanical type of burners.)

*The WEIR is the one warm air furnace having every requisite for oil-burning.*

*Doors cut to order, for any make or type of oil burner*

WEIR Steel Construction—electric-welded and riveted thru-out, absolutely and permanently tight and leakproof, assures permanent cleanliness and guarantees against leakage of smoke, gases and odors.

*There are no dampers or other openings inside the casing of the WEIR Furnace.*

The WEIR Furnace has a long, indirect fire travel, and immense heating surfaces, assuring a maximum delivery of heat into living rooms and permitting the least possible waste to escape out the chimney; yet there are no complicated flues nor small smoke passageways to require frequent cleaning or other attention.



**D**EALERS who are alert to opportunities are "cashing in" on the popularity of oil burning by selling the WEIR Furnace.

*Don't overlook this opportunity! Write us at once for details of our agency proposition—and further information on the WEIR Oil Burning Furnace.*

**The MEYER FURNACE Co.**  
Peoria, Illinois

1924

E

Thoroughly Covers  
the  
Warm Air Furnace  
Sheet Metal, Stove  
and  
Hardware Interests

Founded 1880 by Daniel Stern

# AMERICAN ARTISAN and Hardware Record

Address all communications  
and remittances to  
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AND  
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## Table of Contents

	Page		Page
Editorial .....	19	Indiana Private Dwelling Formerly Covered with Slate, Now Reroofed with Sheet Copper .....	34
Progressive Business Men Do Not Regard Presidential Year as Poor for Their Business .....	19	Landis Award Enforcement Committee Be- lieves Wage Increase Will Cause Building Slump .....	36
Random Sketches, by Sidney Arnold .....	20	Notes and Queries .....	36
Heating and Ventilating Department .... 21 to 26		Hardware Department .....	37 to 40
No Furnace Is Better Than Its Installation, by L. W. Millis .....	21	Window Display .....	37
B. F. Lichty Outlines Plan to Eliminate Faulty Furnace Installations .....	23	Radio Instruments Display Increases Sale of Other Goods as Well .....	37
Dr. Evans Makes Another Unfair Attack Upon Warm Air Furnace in Chicago Tribune ...	23	Fred E. Muzzy, Stricken with Cerebral Apo- plexy, Passes Away .....	38
Honeywell Specialties Company Stages Attractive Exhibit at Oil Burner Manufacturers' Convention .....	26	Hamp Williams Gives Michigan Hardware Men His Definition of Success .....	39
Sheet Metal Department .....	27 to 36	Coming Conventions .....	40
Report of the Missouri Sheet Metal Con- tractors' Convention at Kansas City, April 22nd and 23rd .....	27 to 30	Retail Hardware Doings .....	40
Hold Everything! But Make Your Reserva- tion for the Michigan Outing Now!! .....	30	Stove and Range Sales .....	41 and 42
Sheet Metal Men in Agricultural Communities Can Pick Up Much Added Profit, by O. W. Kothe .....	32 and 33	We All Admit That It's True but We Do Not Live Up to the Rule .....	41
		Advertising Criticism .....	43
		Markets .....	44 and 45
		Hardware and Metal Prices .....	46, 47, 48 and 50

### DO IT THE COMMON-SENSE WAY!!

You'll agree that the common-sense method of advertising is to find out who your prospects are and what fields they are in, and then to advertise to them directly through the specific business paper serving their interests.

This method has been successfully used for nearly three-quarters of a century by more manufacturers than have employed any other method of publicity.

Equally true is the fact concerning the seeking of reliable information about the particular field in which you are engaged.

The editorial columns of AMERICAN ARTISAN are devoted to the development and perpetuation of the Warm Air Heating, Stove and Range, and Sheet Metal industries. Its readers are cordially invited at all times to use this common-sense method of obtaining the advice they need for the successful conduct of their businesses.

Answers to all questions will be held strictly confidential if so desired by the sender. If no mention is made to the contrary, questions and answers will be published in the various departments of AMERICAN ARTISAN.

ALPHABETICAL INDEX AND CLASSIFIED LIST OF ADVERTISERS, Pages 50-52-54.





## TONY -- *Presser of Clothes*

**T**ONY, they call him in his Pacific Coast town. He is a rare artist. He is a presser of clothes—works with the tailor's goose and a damp cloth. But because he is doing a small thing in a great way—because he has clung to an old fashioned ideal—craft-pride—the whole town has beaten a path to his door. Tony has prospered beyond his kind.

In humble shop or gigantic industry, conscientious workmanship brings its reward. Craft-pride is none too common.

Manufacturing Lamneck Simplified Pipe and Fittings with exceeding care and craft-pride—making them in a way that will mean increased profits for our customers—these factors have influenced our steady and consistent growth to an enviable place in the industry.

Sturdy items, they are, simplified to save time and trouble in installing, and built to build good will for all of us. Your name will be in good company on our books.

*Catalogs, prices and samples will be gladly furnished on request.*

THE W. E. LAMNECK CO., 416-432 Dublin Ave., Columbus, Ohio

# LAMNECK PIPE AND FITTINGS



# **Progressive Business Men Do Not Regard Presidential Years as Poor for Their Business.**



**T**HIS is "Presidential Year," and we have gotten so into the habit of thinking that business will not be so good as in other years, that subconsciously we actually let up in our campaign for business—with the natural result that business does fall off.

The late President Wilson had something to say about "a state of mind" in the years before the entry of the United States into the World War, which is just as applicable today.

We might classify the condition of many merchants at the present time as being in a state of auto-intoxication or self-hypnosis. They have made up their minds that business in 1924 will not be up to the average—and for them business will not be very good.

But here is another picture:

In the month of March new companies were organized with a capital of over 808 million dollars, as against 500 million in March, 1923.

Still another:

Building permits issued in Chicago during March totaled over thirty million dollars, as against less than twenty-seven million dollars in March, 1923, and less than nineteen million dollars in February, 1924.

Coming down to matters a little closer:

Furnace manufacturers who have kept after business tell us that their sales—both for immediate and future delivery—are considerably ahead of 1923.

In agricultural sections, like the winter wheat belt of Kansas and in the corn belt of Illinois and Iowa, where the roads have been in reasonably fair condition for travel by team or automobile, the farmers are buying heavier than was the case last year.

The manufacturing centers continue to show almost full capacity activity with high wages, which means good retail business.

The only real complaint comes from mer-

chants and manufacturers of wearing apparel, and in that case the blame is put—rightly, too—on the lateness of spring weather. People simply do not buy light weight suits and wraps so long as the weather is too cold to wear them.

So after all—

Use a bit of common sense and drive that false notion out of your head—those of you who think business is going to be poor—and set yourselves to work for a fair share of the average good business that will be done between now and January 1, 1925.

When it comes to the point, what pleasure can there be for a business man to have his enterprise go along in the average or below-average class?

Is it not really in placing your business on the above-average scale that the real pleasure comes to the owner?

In a game of bridge, the man who always follows the so-called natural order in leading or playing his cards, seldom wins a close game; these nearly always go to the man who "finesses" and uses his brains.

And so it is in any sort of merchandising—

Use your brains, your knowledge, your experience.

And you will show greater gains over a period of years than the man who just goes along and never makes a real effort to get out of the rut of the average.

There is a clearly defined and logical plan of procedure to be followed in the acquisition of greater business. There is no mysticism to be practiced. Thought must precede every action, and until the business man is willing to sit down in the quiet of his study and think out a plan of action which he and his force are to pursue, just so long will he be dubbing along on half pay and an object of ridicule for his competitors.

## Random Notes and Sketches.

By Sidney Arnold

George Auer, who makes warm air registers, was in Southern Europe during the winter. He has just returned with a lot of strictly up-to-the-minute stories—all of them true. Here is what happened when he and others in his party paused on the rim of the crater of Vesuvius. As they peered into the seething mass of horror below them, one exclaimed in an awed tone: "Don't that beat hell?"

Some English women were standing near and evidently overheard. One of them remarked to the others in her well-bred, distinct voice: "Isn't it remarkable how widely these Americans travel!"

\* \* \*

Alf Pomrening, the GiltEdge furnace man with the one-cylinder eyeglass, told me the following story under the impression, probably, that I am a Swede:

Up in Wisconsin, when they cleaned the land they had to blast the stumps. The boss of one of the blasting outfits said to his men: "The hole is drilled, the dynamite is in. I will put the fuse in and I will holler 'Get out of the road.' I will touch my match and run myself." He got the dynamite in, put in the fuse, scratched the match and lighted the fuse and yelled "Get out of the way!" and turned to run and bumped into a big Swede three feet back of him.

"Didn't I tell you to get out of the way?"

"Yes, but for \$2.45 a day I ain't going to yump around a hell of a lot."

\* \* \*

Readers of Sidney Smith's cartoons in the *Chicago Tribune* have been educated to associate Bloomington, Illinois, with the honorable and respected Andrew Gump, whose congressional election campaign slogan was "One hundred per cent

for the people" and who "wore no man's collar."

However, a recent election in Bloomington proves that the citizens of that flourishing down-state community are no more gullible than are the citizens of any other community. Their astuteness, too, in conferring honors of public office is also well developed. The latest object of their affections was none other than a prominent and well known member of the Illinois Sheet Metal fraternity; namely, Harry Butler, 319 Main Street, upon whom they conferred the office of alderman, and congratulations are now in order.

\* \* \*

I had heard rumors to the effect that Lou Denoyer, the dignified metal ceiling salesman and former



Louis A. Denoyer, Jr.

President of the Illinois Auxiliary, was putting a lot of steam into his work, and when I met him at the recent convention in Peoria I asked him if he had been down to Florida and helped himself to a drink of Ponce de Leon's Fountain of Youth or what else had happened to him.

Without waste of words or time he dug into his inside coat pocket

and produced a picture—and I don't blame him now; I would work sixteen hours a day if I could call myself the proud father of a youngster like the one who is smiling at you right now from this page.

The young gentleman's name is Louis A. Denoyer, Jr., and his age at the time the camera was snapped was ten months.

I am of the opinion that every firm could well afford to offer a big financial inducement to its salesmen to have them marry and then another one for a baby.

\* \* \*

On Tuesday, April 22nd, *The Chicago Daily Journal* celebrated its eightieth birthday and also the twentieth anniversary of the purchase of the publication by John Eastman, the present owner and publisher.

Ever since I came to Chicago, 27 years ago, I have enjoyed reading the *Journal*, though frequently I did not agree with its editorials (I am broadminded enough to allow other people to express their opinions even if I know that I am right and they are wrong).

*The Chicago Daily Journal*, as long as I have known it, has always stood for the best, and during John Eastman's management at least, its news columns have been singularly free from editorial bias and dirty yellowism, and so I am glad to endorse the statement made by Dr. R. A. White, another of Chicago's fine citizens whose names stand for something besides money-grabbing, in an article on the preachers of Chicago in the days gone by, when he says:

"*The Journal* is to be congratulated on its eighty years of existence. To survive four score years serviceably is a distinction. *The Journal* has been serviceable. Its news columns have been as clean and wholesome as an exacting public would stand for.

"You may or may not have agreed with its editorial columns, but they were clean cut and outspoken. You were quite sure they were not written to conceal their intention."

## No Furnace Is Better Than Its Installation, Says L. W. Millis at Missouri Sheet Metal Convention.

*Furnace Manufacturers Permit Their Success to Be  
Dependent Almost Entirely Upon Knowledge of Installer.*

"THE Opportunity that the Warm Air Furnace Offers for Service to Mankind" was the subject of the address by L. W. Millis, of the Security Stove & Manufacturing Company, Kansas City, Missouri, given at the convention of the Missouri Sheet Metal Contractors' Association, Kansas City, Missouri:

Sheet metal men make flower boxes. Why not talk about them, and wind up with a grand flourish showing, beyond the shadow of a doubt, that all the wonderful flowers of this world would have been impossible had it not been for the sheet metal man's noble sacrifice of time and energy making boxes suited to their development. You have often heard just such talks haven't you? How about guttering or metal roofs, or a dozen other fractional parts of your business? A good windy talker could show you how essential any of these things are. But I can't talk about any of these things. Your committee said to me: "Now, Millis, for heaven's sake, don't try to talk about something you don't know anything about."

Now, if the sergeant-at-arms will lock the doors, I will talk. How does the following subject strike you: "The Opportunity the Warm Air Furnace Offers for Service to Mankind"? How energetic, how sacrificial that word "Service" sounds! Last year, or the year before maybe, everything was "Efficiency." Now everything is "Service." I don't know what will be in style next year.

Most men who succeed study at least some one thing. Then from bread and butter necessity find it easier to devote what little time they can command to becoming thorough in that same line and fail often to even get more than the rudiments

of some of the other allied lines of work.

Every sheet metal man has been forced to devote much of his time to "cutting," or maybe you call it "laying out." Now, warm air furnace work is largely seasonal and many a man has not had time to study carefully one of the great sciences—heat. We hear about radiant heat, convected heat, conducted heat, British thermal units, also plain and fancy heat units. We hear about direct and indirect heating surface and fire-shine. We hear about fixed carbon and volatile matter, and also about carbon monoxide and carbon dioxide, and then again we hear about CO or CO<sub>2</sub>.

Consequently when most of us try to "high-brow" a customer by the use of these or other similar terms we certainly do mix things. I recall a certain man who not long ago advertised that his device burned up all the heat units in the fuel. I suppose if he had been a sewing machine man he would have claimed his machine sewed all the yards in a spool of thread, and if competition was keen, would have included the back yard also.

That class of "try and fail" furnace installer has done much to put the warm air furnace in disrepute, but I am not sure that he is a greater offender than we manufacturers, who glibly advertise "Buy one of our World-Beater Furnaces and be happy ever after—(saves one-half the fuel)." Of course, you know that no furnace is better than its installation, and manufacturers have largely allowed themselves to be dependent for the success of their furnaces upon the work of the installer, who oftentimes knows no more about that important thing than the manufacturer did. This results often in the user not shouting as loudly for warm air work as

those who get a furnace job in which the proper proportions in pipes, registers, return duct, etc., are used throughout.

Millions of dollars have been spent in advertising furnaces, with the result that furnace makers are fairly busy. I am sure, however, that if a small percentage of that expenditure had been wisely applied to assisting in a comprehensive education of the installer, upon whom both the manufacturer and the user are dependent, the user would have done more advertising and the furnace factories be still more busy. Some manufacturers have tried to remedy this by going direct to the user. It is manifest that this results finally in the manufacturers' direct sales costing the user more than it should, or else they finally fail to give personal attention to all work. In any event, the sheet metal man loses out.

The question is, "Can the sheet metal man get this work?" I am only going to point the way. You will have to answer it yourselves.

Only a short time ago a few far-seeing furnace and material men known as the Western Warm Air Furnace and Supply Association thought they saw a remedy. I think some of those present recall the storm of derision that threw wave after wave of sneers, insinuations and loud laughter at Hussie, Nesbit, Park, Percival, Fehlig and others whose names I do not recall, when they began to agitate a Standard Code for warm air work. But, like steadfast men of vision always do, they remained in the game until other organizations joined them, and now you actually have a Code that has been adopted by authoritative bodies. Even some universities accept its fundamentals.

I think this Code lays a foundation for the sheet metal men to become the dictating factor in that business. Some people say it requires too much time to make the accurate calculations needed, but I am sure that in time tables will be created from which every requirement can be read at a glance. I have made up two that are good as



far as they go. Any of you who want copies can give me your name and I will mail them to you. They will soon appear in the AMERICAN ARTISAN report of the proceedings of the Security Stove & Manufacturing Company Warm Air Study Club. They point the way and I hope that soon some man with brains as well as patience will make up a table of still more value to the furnace man.

You see from this table that any common, rough-neck sheet metal man can select proper sized pipes for each room, under six conditions of exposure, just as correctly as any high-brow can. He can also calculate the return air requirements accurately. If the sheet metal men of the country become expert in the use of that Code, they will drive out the direct-to-user manufacturer. That is a short, flat statement, but it is the essence of all I have to say today. The future of the warm air industry will be decided by your attitude toward it. Of course, the Code in its present form has just a little bit of compromise in it and some things might be clearer. I am sure they will be in a short time.

I often wonder if the furnace installer realizes his opportunity to serve mankind in a great way. The painter puts memories and dreams on canvas. The sculptor clothes marble with living thought. Those of us who thrill with appreciation of their work find our own lives enriched. The honest, intelligent furnace man does more than the artist or sculptor.

In every home in which he works he prepares the way for men, women and children to live during seven months of the year in a better climate than nature averages anywhere in the world. In his climate they may live and dream. They may hope, love and triumph. They may, if they will, maintain the greatest thing in the world, an American family. Do you know of any greater achievement? I do not.

Without malice toward those who are asleep, I want to congratulate the rest of you on your eyelid control.

### ***The New Armstrong Guaranteed Steel Furnace Has Many Exclusive Features.***

The well known sheet metal specialty manufacturing enterprise known as Thomas & Armstrong Company, London, Ohio, has recently gone into production of a steel warm air furnace which has a number of exclusive features that should make it a good seller among house owners who are not looking merely for a "tin can" in the basement.

They have chosen the name of "Armstrong Guaranteed" for this new furnace, and it is built on principles long established as sound construction practice.

The accompanying illustrations show some of the exclusive features—such as the carburetor or smoke consumer, acting in unison with the front draft; the extended fire brick which protects the rear of the drum and collar flange, thus adding years to the life of the furnace; the welded radiator which is guaranteed gas



Figure 1. Showing Smoke Consuming Device, High Water Pan and Upright Shaker.

and smoke tight and is equipped with large cleanout with cast collar and hinged cover; the handle operating the "indirect" damper (shown at the left top in Figure 1, projects through the furnace front at a convenient height; the extra large water pan above the fire door; all collars are cast in one piece and extend through casing.

The main drum is made of 3/16-inch copper bearing fire box plate and is made with cold driven rivets,

the seams being thoroughly calked; the feed pouch is cast in one piece with overlaps which protect the front fire brick from being chipped or broken by the poker; it is smooth

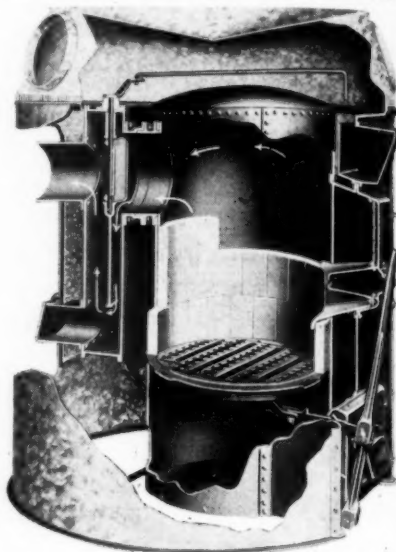


Figure 2. Showing Overlapping Feed Pouch, Grate Construction and High Fire Brick in Rear.

and self-cleaning; the upright shaking device will shake or dump the grate as desired, and is said to leave the bars always in a level position.

The main sales office of the furnace department is at 75 North Front Street, Columbus, Ohio, the general offices and factory being located at London, Ohio; request for catalog and other information may be sent to either office.

### ***A. D. Blackwell Joins Forces of International Heater Company in Cincinnati Field.***

A. D. Blackwell, No. 410 Bell Block Building, Cincinnati, Ohio, who has represented the Utica Heater Company in Cincinnati for a number of years, has just been appointed representative in Greater Cincinnati for the International Heater Company, Utica, New York.

Unfair competition, embracing all acts characterized by bad faith, deception, fraud, or oppression, including commercial bribery, is wasteful, despicable, and a public wrong. Business will rely for its success on the excellence of its own service.

## B. F. Lichty, Waterloo, Outlines Plan to Do Away with Faulty Warm Air Installations.

*Says Installers at Omaha, Nebraska, Are Now Operating Under Similar Plan, and Number of Installations Is Increasing Steadily There.*

THERE has been much agitation, some justified, some not, regarding poor installations of warm air furnaces. Any discussion of this problem which seeks only to place the blame, either in one place or another, without offering a solution to the vexatious question gets nowhere.

B. F. Lichty, of Waterloo, Iowa, goes one step farther than talk; he comes forth with a plan of action designed to "tell what to do about it."

Mr. Lichty's letter follows:  
TO AMERICAN ARTISAN:

### A Campaign Started on Furnace Installation.

In reading the articles in your valuable issue of March 29th, referring to W. H. Brabazon, Beloit, Wisconsin, who says that he thinks he has found the reason for the low-grade furnace installations, I agree that the article gives some good reasons and there are many others. I feel that I, too, have found a solution.

My idea is to give the owner a satisfactory heating plant which will cost very little more than the unsatisfactory job and the only proper and sanitary way of heating a home by an indirect system.

I have studied the Codes regulating the installation of warm air furnaces adopted by the National Warm Air Heating and Ventilating Association, and now am carefully studying the Standard Code, second edition March 1, 1923. I find this latter one that will bring the furnace business up to the standard it should be.

My proposition is to draft an ordinance and have it approved and passed by the city council, which I feel can be easily accomplished. Our present Code is about as good as though we had none. Furnaces are now installed as the general contrac-

tor directs, or as the dealer wishes, which is usually as cheaply as can be done. With the Standard Code being adopted and all jobs being strictly inspected, compelling all installers to comply with the Code, there can be no job installed but what will give entire satisfaction. This will give the owner something he would not exchange for a hot water or steam plant.

This ordinance will help the dealers, as all would be obliged to figure a furnace large enough, using the size registers and fittings required and installed in practically the same manner.

Then there could be very little difference in the cost of the installation. With all installers figuring alike, the prices would be more uniform, and give the dealer an opportunity to add a reasonable per cent

of profit. Consequently we would each sell as many jobs as under the former system, and our customers would be better satisfied.

The recommendations from our customers make it seem that such a method would create a demand for warm air furnaces in place of hot water or steam.

This Code has been in operation in Omaha, Nebraska, for the past two years and of the forty dealers there, all are doing a bigger furnace business and making more money.

By our organizations of the Sheet Metal Contractors' Association in the different states, I can see the opportunity for great advancements in this line of our business. Iowa now has a full time secretary, we anticipate great improvements in the sheet metal industry.

B. F. LICHTY.

Waterloo, Iowa.

EDITOR'S NOTE.—Such discussion as that given heretofore cannot fail to produce untold good for the warm air heating industry, and Mr. Lichty should be emulated by other installers through AMERICAN ARTISAN.

## Greater Publicity for Efficiency of Warm Air Humidifying Systems Needed.

*Manufacturers Should Prepare Road for Installer by Educating Public on How to Use Humidifying System.*

IN the department "How to Keep Well," which is conducted by Dr. W. A. Evans for the *Chicago Tribune* and other newspapers which buy his syndicated articles, many references are made to heating, ventilating and humidifying, especially with reference to residence buildings.

We quote from recent issues of the *Chicago Tribune* the following letters on humidifying, together with Dr. Evans' remarks:

### Evaporating Pans.

C. N. P. writes: "E. P." writes his trials and tribulations with hot air furnaces, and especially with evaporating pans. For sixty years I have used a dozen different kinds of furnaces, and for fifty as renting

agent I have had charge of hundreds of them, and have bought as many as a hundred, and I have never known one to have the evaporating pan set below the line of grate and fire bed, as "E. P." states.

Furnace men have told me that the damp Chicago climate does not need much evaporation of water in casing. Opinions differ. I will give "E. P." two tricks that I believe will put him in better humor and I will wager he has never heard of them before.

1. The night before cleaning ash pit pour a gallon or more of water into ash pit. The next morning there will be no dust when ashes are removed.

2. And more efficient than all Dr.



Evans' suggestions (please pardon the egotism, Dr. Evans), replenish the evaporating pan with boiling water. Action begins at once and each of these tricks "work while you sleep."

**Dr. Evans' Reply.**

You have been misinformed as to the Chicago climate. You will have no trouble finding hot air heaters with water pans located below the fire.

If at first you don't succeed, try, try again.

**Suggestion for Humidifying.**

W. H. P. writes: Here is a suggestion for "E. P." Let him see his furnace man and have the water pan removed from the lower part of the furnace and close up the hole, then buy two more water pans, and have the furnace men set them in the furnace jacket at the top of the fire bowl. This will evaporate all the water necessary if he keeps them well filled. I have an eight room house, all large rooms but two, reception room 9x12, pantry and bathroom, and long hall upstairs in addition. When the weather is extremely cold, making it necessary to have a hot fire in the furnace, I often evaporate ten gallons of water in twenty-four hours. I have my hot water tank in the kitchen connected with my furnace; where the cold water pipe enters the furnace I have a faucet. Here I keep a bucket, and three times a day, when I fire my furnace, I fill the water pans. My wife kicks because our windows are all frosted over in severe cold weather. This never happened until I had the water pans set as above. In wet weather I use only two of the pans. I wrote you about this scheme eight or ten years ago, and you published my letter at that time. The expense is only nominal.

**More on Humidity.**

F. M. C. writes: There seems to be considerable interest manifested in your department in regard to humidity in dwelling houses. If you care to publish it, I will give you my experience.

We live on a farm and have hot water heat; after using this a while we noticed that our furniture was

becoming loose, and chairs, etc., would come apart. I tried for quite a while to think of some scheme to get more moisture in the air, and finally it came to me. We had occasion to install a new range boiler in the kitchen on account of the old one springing a leak in the bottom. I took the old boiler and put it in the basement near the furnace. I placed it on a stand which I made, with the leaky end up. I then connected one pipe to the bottom of the boiler and one at the side, running them to furnace and connected with a coil I had made and placed in fire-box. I then ran a pipe from top of boiler up through the floor into the sitting room. It was at edge of room and at side of door into the dining room. In this upright pipe I put a cock to use in shutting off steam if so desired, but have never found it necessary. If, for any reason, I did want to shut steam off, it would escape through the leak and into furnace room; I usually kept a little wooden peg in leak hole. In mild weather, when there is not much fire required, it doesn't make much showing, but when firing heavier I have seen the steam shoot out for six or eight feet. If any one reading this cares to try it, I think they would be able to get a suitable boiler from a junk dealer and have a humidifier made at no great expense.

One could regulate the amount of steam by using a larger or smaller coil; my first coil was not large enough and I put in a larger one. One should keep enough water in boiler to be sure at all times to have water level above the pipes and coil. In filling the boiler I use a funnel in upright pipe. I have no water gauge, so use a stick.

**How Many Ways Can the Grate Be Destroyed?**

Here is something for the Warm Air Heating fraternity to think about. The Security Stove and Manufacturing Company Warm Air Study Club, Kansas City, Missouri, wants Mr. Glore to explain all of the many ways in which a grate may be destroyed.

They write as follows:

**To AMERICAN ARTISAN:**

In your issue of March 9th, 1924, page 16, E. F. Glore is credited with broadcasting this statement: "Keep the ashes from the ashpit, as you will never need new grates unless the ashes are allowed to accumulate up to the bottom of the grates."

Our experience is that many grates (probably half of the total wastage) are destroyed by shaking ashes down so that fuel at very high temperature is in direct contact with the top of the grates. Many grates are destroyed when the first fire is made and no ashes have ever been in the ashpit. When a user *knows* the ash pit is clean and a grate is destroyed it is hard for the installer to make the user believe the grate was not defective (rotten iron) when authorities tell him it can only be destroyed by ashes under the grate.

We think every manufacturer should advise all dealers and users of *all* the ways grates may be ruined.

Security Stove and Manufacturing Company Warm Air Study Club.

**They Want to Know What Happens to the Kitchen Odors, Mr. Allen.**

From the Security Stove and Manufacturing Warm Air Study Club, Kansas City, Missouri, comes the following letter in regard to the article by James Charles Allen, appearing in our February 23rd issue, page 18.

The letter is as follows:

**To AMERICAN ARTISAN:**

In your issue of February 23rd, 1924, page 18, Mr. Allen says, Return air from kitchen (presumably impregnated with odors of cooking) loses the odor if taken through an air duct back to furnace. We have sometimes been compelled, in old work, to take some air from kitchen but have always told the occupants to expect odors throughout the house.

If the air really flows back to furnace where, and how, does it give up its odors?

Security Stove and Manufacturing Company Warm Air Study Club.



### **Meyer Furnace Company Builds Special Furnace for Oil Burning Devices.**

The Meyer Furnace Company has taken cognizance of the growing interest in oil burners and has placed on the market a special type of their Weir steel furnace.

The most noticeable difference to the casual observer is in the lower door which is plain—without handles or draft opening in the new furnace. The door will be cut to order to fit any make of oil burner.

The company states that the electric welded and rivet construction of the Weir makes it permanently absolutely tight, so that no gas, odor or smoke can escape into the casing or the heating pipes. There are no dampers or other openings in the Weir inside of the casing.

### **Western Warm Air Furnace and Supply Association Will Meet June 11 in Des Moines.**

The following letter has been received from Secretary John H. Hussia, announcing a one-day meeting of the Western Warm Air Furnace and Supply Association, to be held June 11th at the Savery Hotel, Des Moines, Iowa:

TO AMERICAN ARTISAN:

Wednesday, June 11th, has been decided upon as the date of the semi-annual meeting of the Western Warm Air Furnace and Supply Association.

This meeting will be held at the Savery Hotel, Des Moines, Iowa. The morning session will open at 10 o'clock sharp.

As this meeting is to be for but one day, the Executive Committee has decided that very little, if anything, will be done in the way of set speeches. The intention is to jump right into business from the start.

We have some very important work going on in Standardization and the consideration of uniform Estimate and Contract Blanks, as well as the proposed additions and changes to the Standard Code.

It is hoped that every member will attend and bring a non-member friend with him.

You are promised the snappiest day's business mingled with a little enjoyment, the latter part being in charge of Blair Quick, which insures efficiency. Mark your calendar for this date and be there.

### **International Heater Produces New Spring Cleaning Cards.**

"Now is the time to scout for heater repair business." This is the opinion of the International Heater Company, Utica, New York.

Warm air furnace manufacturers realize that the psychological time for the installer to make a special effort for repair business is now, when furnaces are running at low speed and soon will be allowed to go out entirely.

Many of these manufacturers are going a step farther and are preparing postal card reminders to be mailed by the installer to his patrons.

Among the latest of these cards to come to our notice is one arranged by the International Heater Company, Utica, New York.

The card is of the postal card folder type, having a place for the installer's name and address. Then on the reverse side space is allowed for the patron to insert the time he wishes his heater cleaned and repaired.

On the reverse side of that section of the card which is addressed to the patron, the following words are found:

"In the Spring a young man's fancy—"

"Let it be the privilege of youth to finish the quotation, while we married men remove storm doors, put on the screens, clean the yard and assist our better halves in turning things wrong side out for a thorough cleaning.

"With the return of spring we let our fires go out and offer a little prayer of thanks that we are out from under the clutches of Old Man Winter.

"But—Remember. Winter will return—then you will want your heater in condition to use.

"Prepare now, while the 'Spring Cleaning Fever' is on. Have us

clean and repair your heater and put everything in first-class shape for another season's use."

In addition to this, the card carries an illustration of a booklet on "How to Operate Your Heating Plant with Less Coal," by L. R. Taylor. The caption announces that the booklet will be given to the patron free after he has had his heater cleaned and repaired.

These cards are sent to the installer on request and a nominal charge covering their cost is made.

### **Learn to Coordinate Your Advertising and Sales Forces.**

In selling furnaces the emotional appeals can be made most effective only when advertising and sales arguments are coordinated.

Coöperation, coördination and understanding between the advertising and sales forces strengthen the effectiveness of advertising. The duty of advertising is to attract the customer to the store and there the sales force takes charge.

A large department store tried an experiment recently to determine the "pulling power" of its advertising which showed the inefficiency of its sales force. It found that 200,000 people entered the store in one day. The clerks sold only 30 per cent of the people who came in and 70 per cent of the opportunities put in front of the clerks were wasted.

The selling talk that goes into the copy must be clear, high type, good English, free from objectionable slang; and the selling talk engaged in by the clerks should be just as high type and unobjectionable.

If the copy writer offers the suggestion that the customer should purchase an article for a specific reason, the salesman should back up this suggestion with a like statement in his sales talk.

A salesman must learn to inject the element of simplicity in his sales talk as the advertising copy writer has learned to do in his writing. There should be nothing stilted, nothing that is not easily understood by a boy in the second grammar grade, in the advertisements.

## Honeywell Specialties Stages Attractive Exhibit at Oil Burner Manufacturers' Convention.

*Importance of Automatic Control on Oil Burners Forcefully Demonstrated at the St. Louis Meeting.*

THE American Association of Oil Burner Manufacturers held its annual convention in St. Louis, Missouri, recently.

In view of the various causes which have driven home owners to seek more dependable and less costly method of residence heating than that of coal, the oil burner has come into much prominence, and one of the features of the convention men-

only. These are shown connected to the burner in the illustration of the exhibit.

A recent catalog issued by the company shows the Honeywell controls which are of prime interest and importance to oil burner manufacturers.

Described in the catalog are: the Honeywell thermostats, terminal block and testing bases, motor

ly automatic—the thermostatically controlled oil burners—will endure in the domestic heating field.

"This places a heavy burden of responsibility on instruments of control.

"Honeywell's contributions to the entire industry have for years been highly valued by heating men everywhere.

"The entire industry knows and appreciates the Honeywell temperature regulator, the non-wind electric motor, the aquastat, the vaporstat, the furnacestat with aerofan, the individual duct fan, the unique valve, the motor valve."

### *Practical Rules for Successful Warm Air Installation Issued by Richardson & Boynton Company*

Manufacturers of warm air furnaces have come to realize that unless they put forth a strong effort in educating the installers of their products in the proper method of installing their products, their increased sales are going to be seriously hindered and delayed.

Many of the manufacturers who make up the progressive element in the industry are preparing for their installers' use small pamphlets of practical rules.

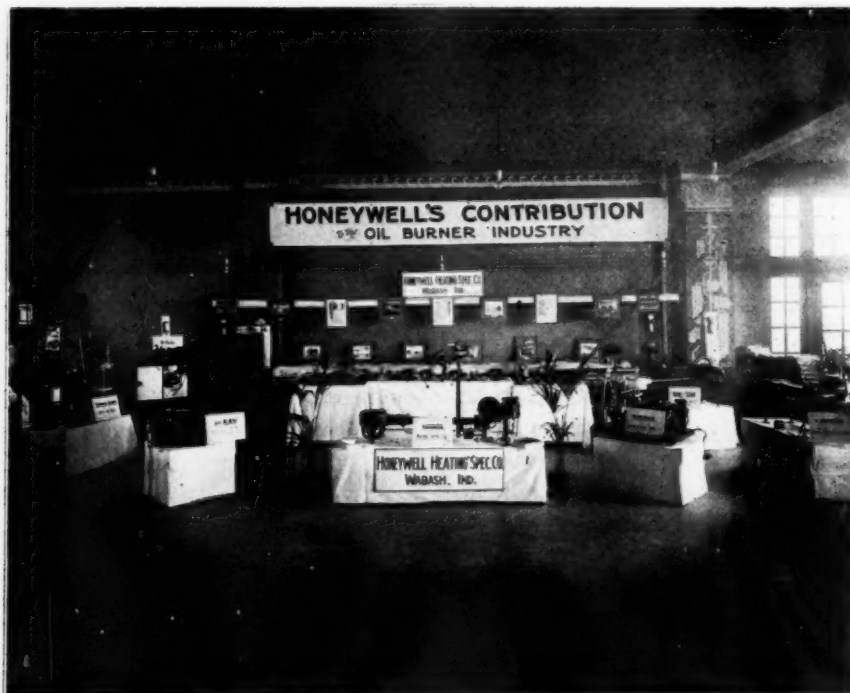
The latest manufacturer to come to our notice doing this type of educational advancement work is the Richardson & Boynton Company, 260 Fifth Avenue, New York City.

The booklet is 4½x7½ inches containing twelve pages.

The rules contained in pamphlet which this progressive company has issued govern the installation of every part of the furnace.

The following extract from the booklet is representative of the material contained therein and it shows the extent to which the heating needs of the average dwelling have been anticipated:

"In connecting a cold air box with a heater, it is always most desirable to make the connection in the rear of the furnace, or by having a cold air pit under the furnace. This pit should never be over fourteen inches deep—twelve inches is better.



Illustrating Exhibit of Honeywell Heating Specialties Company, Wabash, Indiana, Staged at Oil Burner Manufacturers' Convention, St. Louis.

tioned heretofore was the exhibit of many oil burners held in conjunction with the convention.

The accompanying illustration is that of the exhibit of the Honeywell Heating Specialties Company, Wabash, Indiana.

The Honeywell temperature regulators are well known.

The entire manufacturing program is given to that of designing and building heat regulating and limiting devices. The company does not manufacture any part of the oil burner proper; the instruments being used for controlling the burner

switches, aquastats, vaporstats, aerofans, and smokepipe damper regulators.

A folder was also mailed to all oil burner manufacturers prior to the convention by the Honeywell Company. The folder called attention to the Honeywell exhibit at the convention.

We quote a portion of the Honeywell message to oil burner manufacturers:

#### **The Importance of Automatic Controls:**

"Keen engineers and manufacturers agree that only the complete-

## Missouri Sheet Metal Men Hear Lively Discussions on Cornice Work at Kansas City Convention

*John H. Hussie Relates Experiences in Getting Sheet Metal Men to Organize—V. H. Parks Elected President at Meeting April 22 and 23*

**S**TANDING at all times as it does for the betterment and upbuilding of the sheet metal business, and for a peaceful and just solution of all labor problems, the Missouri Sheet Metal Contractors' Association carried out its Kansas City convention program, held April 22 and 23, 1924, with zest and with a determination to make the most of a golden opportunity to discuss problems of common interest made possible by this the association's fourth annual meeting.

Local association representatives and individuals from every section of the state of Goldenrods, who have selected as their motto, "Let the people's safety be the supreme law," met at Kansas City to discuss the best ways and means of promoting public safety insofar as their business relations effect that safety, which they have found can be brought about only by the close cooperation of business men.

The meeting of the board of directors was held early Tuesday morning, and during this interval in the proceedings registration and the

distribution of badges took place.

The delegates were welcomed to Kansas City by James McQueen, Vice-President of the Kansas City Chamber of Commerce. The response was made by Charles T. Kornbrodt, who in behalf of the delegates thanked Mr. McQueen for the hearty manner in which he had opened the gates of the city to them.

The President, Secretary and Secretary successively reported.

President George E. Walter reported as follows:

**Address of President George E. Walter.**

I have followed the call and endured the pleasures that fall to the lot of a sheet metal worker for thirty-eight years. During that time I have attended several conventions. I have seen the work accomplished by the organization and know of its true worth.

Last year at St. Louis I had the honor conferred upon me of being chosen president of the Missouri Sheet Metal Contractors' Association. I have tried to fulfill the obli-

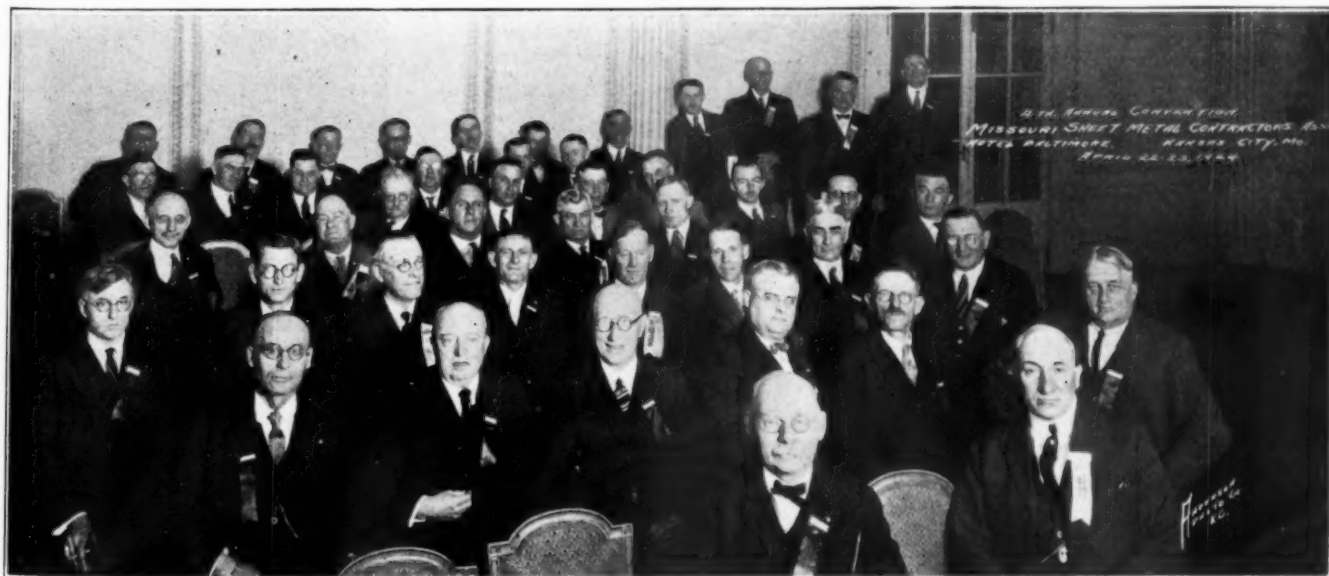
gations which this office brought with it to the best of my ability.

There are a number of towns which are much in need of some local association work. Springfield, Joplin and St. Joseph are among our progressive cities where a better organization would be profitable to their sheet metal contractors.

Owing to unavoidable circumstances, I was unable to accomplish any great work.

After a visit of the National Secretary, E. L. Seabrook to Kansas City on February 8th, 1924, new life was added to our local association and much of the work done was in trying to upbuild the Kansas City local, which resulted in a gain of about thirty new members. I hope to see our local fully affiliated with the state association in the near future.

I visited Leavenworth in company with E. L. Seabrook to a reorganization meeting, where the results were gratifying. An organization is a body of persons formed for the purpose of attaining a common object. With this in mind, our



A Group of Missouri Sheet Metal Contractors Photographed in a Moment of Intensive Concentration During the Recent Convention Held at Kansas City, Missouri.



greatest need is a close coöperation of officials and individual members. An association is just as much of a benefit to one as another, and as in all things else, you can get out of it only what you will put in.

"Association Work" was the subject assigned to John H. Hussie, Omaha, Nebraska. Mr. Hussie



**George E. Walter,**  
Retiring President, Missouri Sheet  
Metal Contractors' Association.

spoke of his experiences in trying to organize the different sections of the state. He spoke, sometimes descending almost to humorous derision, on some of the reasons given by men for their refusal to support an organization when approached on the subject. He put himself on record as being astounded with the mistaken ideas so many of these men have regarding the aims and objects of sheet metal associations. He reminded the members that they could only expect to reap where and in quantity that they had sown.

He particularly mentioned the dissatisfied member who insists that he does not get anything out of his association, the man who admits he does not attend meetings and when he meets you the day after the meeting asks what has been done, and then criticizes every action.

"Remember," he said, "a certain amount of conceit is necessary, for your neighbors don't think any more of you than you think of yourself."

Mr. Hussie spoke of the Standard Code and the research work of the

National Association, telling how many architects are already specifying installation according to the Standard Code.

He urged members to form local associations for their own benefit, even if there are only two tanners in the town.

He spoke of the trouble in Omaha and how the City Code won out, by showing the public officials the necessity of healthful, sanitary heating and ventilating. He derided the sheet metal man who will put in a poor job just for the sake of a little more money, and he showed how such work helped to tear down the entire industry.

"Figure your job by the Standard Furnace Code," said he. "Get a good price and make a good profit on a good job."

Sheet metal problems were discussed by Mr. Reinhart, of the American Rolling Mill Company, Middletown, Ohio, who talked on rust and corrosion. Mr. Reinhart's remarks followed pretty much the same outline as those of D. M. Strickland before the Illinois sheet metal men at Peoria, and which appear on page 28 of AMERICAN ARTISAN for April 12.

Credits and collections were taken up by J. E. Woodmansee, as follows:

#### Summary of Mr. Woodmansee's Address.

During 1923 there were 20,000 business failures, mainly caused by extending credit carelessly.

Assets of failing firms were \$356,000,000, with liabilities of \$631,000,000, but after payment of all court expenses, etc., creditors averaged only 15 cents on the dollar.

The chief reasons for these failures can be tabulated as follows:

- (1) Incompetence.
- (2) Inexperience.
- (3) Lack of Capital.
- (4) Speculation.
- (5) Extension of Unwise Credit.

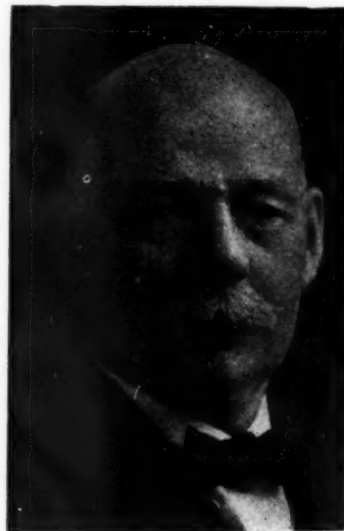
Mr. Woodmansee stated that since he can remember the average sheet metal shop has been hidden away on a side street, apparently afraid to have anyone know it is in business. It pays to advertise and everything

you do advertises you. If you stay hidden away in a dark alley, with improper surroundings, how can you expect people to find you, and how can you hope to succeed in business?

In 1923 there was a larger percentage of failures than in any one year since the big 1893 panic, except in 1921.

Everybody at some time or other gets a request for a financial statement, but few realize that the manufacturer or jobber asking for it analyzes it carefully to determine the following facts regarding your business:

- (1) Ratio of Merchandise to Accounts Receivable.
  - (2) Ratio of Net Worth to Fixed Assets.
  - (3) Ratio of Sales to Accounts Receivable.
  - (4) Ratio of Sales to Fixed Assets.
  - (5) Ratio of Sales to Net Worth.
  - (6) Ratio of Net Profit to Sales.
- And all these factors are taken



**J. B. Fehlig,**  
Re-elected Secretary, Missouri  
Sheet Metal Contractors'  
Association.

into consideration when deciding upon credit responsibility.

From his boyhood days, Mr. Woodmansee said, it seemed to him that the average tin shop made no headway—just a good living for the owner. In fact, he felt toward the tin shop pretty much as "Abe Martin" when he said, "A pretty woman

and a hippopotamus were pretty much alike to him—he liked to look at them, but would not care to own either."

Mr. Woodmansee urged the sheet metal man to cheerfully furnish a financial statement to his jobber, who would be more than glad to analyze it and show him where the faults and weak spots were.

The contractor has a wrong idea when he tells his supply house he can find out about his credit from one of the other firms he deals with. He must remember that it is just as "nervy" for him to ask for credit as for the supply house to ask for a statement. Their credit man may know nothing of your particular business, but he has seen thousands of financial statements and analyzed them. Give Dun and Bradstreet statements when they ask for them, or the chances are the clerk who interviewed you will give you a poor rating; also give the jobber and manufacturer a statement which he can compare with that of Dun and Bradstreet's.

When a request for credit is received from a new customer, first a letter is sent to all supply houses for information. Secondly, letters are sent to lawyers and banks in his town, in addition to securing direct statements as well as Dun and Bradstreet, all for comparison.

At a recent hardware jobbers' meeting in this territory they reported a falling off of 10 to 12 per cent so far this year, but in other lines increases were reported, although no great improvement can be expected until crops are gathered, for after all, business success depends on agriculture.

The farmer needs to be educated to prepare for a rainy day. The farmers' credit is now impaired. Consequently, the merchants' credit in farming communities is impaired, while there is plenty of money in the larger cities to be had at even 4½ per cent. The big firm has no trouble to get money now, but the little fellow is the one who has difficulty.

The little fellow—like the big firm—must *keep* books carefully and watch collections. He must keep

books *right*, send out statements and follow-up bills.

Because of recent bank failures, checks have been returned unpaid and it is well to note that in such cases your customer is not liable, as his account has been charged before clearing with the amount of the check. Recently the Supreme Court decided that the Federal Reserve Bank is responsible, the specific case being that of Federal Reserve Bank of Richmond, Virginia, vs. T. J. Malloy.

As an outsider, Mr. Woodmansee made the suggestion that every



Julius Gerock,  
Elected Sergeant-at-Arms.

sheet metal man ought to use his window; keep it clean and trim it attractively. He suggested that the sheet metal trade ought to adopt a slogan similar to the "Save the Surface" and use it in their advertising, for he said practically no timely suggestions ever came to him from the tinner and when he needs a job done he has to go and look for a tinner.

In the discussion that followed the following point was brought out:

"The average sheet metal contractor loses money on small jobs because he wants to accommodate his friends and hasn't the nerve to turn down a job. He hasn't the backbone to refuse to patch where an entire replacement is necessary, and consequently he loses the profit he would make on the bigger job."

There was considerable discussion of the following question submitted in the Question Box: "What should a contractor do when he is asked to put up a job where the materials have been bought direct?"

The general opinion seemed to be that the contractor should refuse to do it.

This ended the Tuesday session of the convention, with the exception of the banquet, which was held in the evening. It was stag.

The Wednesday morning session was opened with an address by L. W. Millis, of the Security Stove and Manufacturing Company, Kansas City, who spoke on "The Opportunity That the Warm Air Furnace Offers for Service to Mankind." This address appears elsewhere in *AMERICAN ARTISAN*.

George Harms, Peoria, Illinois, then spoke on cornice work, and his remarks were in fundamental content a repetition of the talks he gave at Wisconsin and more recently at the Illinois Sheet Metal Contractors' convention. The remarks and the diagrams used by Mr. Harms appear on pages 47 and 48 of March 15th issue of *AMERICAN ARTISAN*.

W. W. Howe, of the Ideal Heating Company, spoke quite extensively on the oil burner and its possibilities and problems. \*

The morning session closed following the Question Box discussion, which was conducted by Julius Gerock and H. W. Symonds.

A resolution was passed to appoint a committee to confer with other state associations and with proper representatives of the national association regarding the appropriation of a sum of money to place the sheet metal cornices in the proper light with architects and builders.

The afternoon session was taken up with the reports of the various committees, the election of officers, the election of delegates to the National convention, the selection of the next convention city, and an automobile trip about the city.

The election of officers resulted as follows:

President—Vernon H. Parks, Kansas City.

First Vice-President—M. J. Morrison, Poplar Bluffs.

Second Vice-President—T. J. Murton, Carthage.

Secretary—J. B. Fehlig, Kansas City.

Treasurer—F. J. Bokern, St. Louis.

Sergeant-at-Arms—Julius Gerock, St. Louis.

Directors—One year, L. H. Dorn, Joplin; three years, H. W. Symonds and George E. Walter. The remainder of the board consists in the following holdover directors: E. B. Langenberg, St. Louis; A. Zahner and J. Kerkerling, of Kansas City.

The delegates elected to attend the National convention in June at Washington, D. C., are: H. W. Symonds, E. B. Langenberg, L. H. Dorn, E. E. Miller, G. E. Walter, A. Zahner, V. H. Parks and Mr. Payne.

Delegate to the National Warm

Air Heating and Ventilating Association convention, L. W. Millis.

Among the jobbers who contributed to the convention fund are:

Berger Manufacturing Company.  
Excelsior Heating & Supply Company.

Gerock Brothers' Manufacturing Company.

Gille Manufacturing Company.

Merchant & Evans.

Meyer Furnace & Supply Company.

Milwaukee Corrugating Company, Kansas City Branch.

Nebel Paint Manufacturing Company.

Pittsburgh Plate Glass Company.  
Richards & Conover Hardware Company.

Sewall Paint & Glass Company.

Symonds Register Company.

Townley Metal & Hardware Company.

Wheeling Corrugating Company.

U. S. Register Company, Kansas City Branch.

of, but the committee, after careful consideration, decided to add the sight-seeing trips and transportation to and from the boats to hotels, which were not included in the first figures. The committee found that it could get much better rates and better service by contracting for them in advance than as individuals, and it knew the guests would all want to see these places of interest. Therefore it feels sure its decision will meet with the hearty approval of all.

In looking over these rates bear in mind that they include all necessary expenses except breakfast. They include all transportation, hotel lodgings, berths on steamers and trains, transfers to and from hotels, sight-seeing trips and all meals, except as stated heretofore, breakfast.

The committee has made generous reservations of staterooms and rooms at hotels, but it advises those intending to take the trip to get their reservations in early, for after these are gone the committee can hold out no promises, for it is going at the height of the tourist season and unless you have reservations made in advance it will be practically impossible to get staterooms on the steamers or rooms in the hotels.

It will be a wonderful seven days and a trip you will long remember, so let the committee have your reservations with check by return mail.

The fare from the points in Michigan will be as indicated hereinafter, while rates from other points will be quoted upon application to Harry E. Rhodes or Frank E. Ederle.

#### The Fare.

Adrian .....	\$103.50
Battle Creek .....	107.00
Bay City .....	107.00
Benton Harbor.....	113.00
Detroit .....	100.00
Flint .....	104.00
Grand Rapids .....	108.75
Hillsdale .....	105.00
Jackson .....	104.00
Kalamazoo .....	108.00
Lansing .....	105.00
Saginaw .....	106.50

The fare includes all railroad and steamship charges, transfers from

## Hold Everything!! But Make Your Reservation Now for the Michigan Sheet Metal Outing!!!

*Remember the Trip Is Being Made at the Height of the Tourist's Season—July 19 to 26—  
and You May Get Left Unless You Act Now!*

“A TRIP worth while” is indeed a fitting epitomized characterization of the 1924 outing of the Michigan Sheet Metal and Roofing Contractors' and Auxiliary Associations, which is to be held July 19th to 26th, inclusive.

Every outing of the Michigan Sheet Metal and Roofing Contractors' Association has been a grand success, and the 1924 outing is going to add another bright star to the record. This outing will be more elaborate than any in the past, for guests will be taken on the fastest boats, the largest ships and stop at the finest hotels on the trip to that historical city of Quebec.

On the trip the guests will enjoy a ride on the beautiful Detroit River, Lake Erie, visit Niagara Falls, one of the seven wonders of the world,

pass through the Thousand Islands, noted for their beauty, shoot the rapids of the St. Lawrence, which gives a never to be forgotten thrill, see the falls of Montmorency, which are twice as high as those of Niagara, visit the Shrine of St. Anne, where thousands of pilgrims travel each year, as well as visit great commercial cities such as Detroit, Buffalo, Toronto, Montreal and historic Quebec.

When the guests are dining in that grand hotel Chateau Frontenac, situated on the side of a mountain looking down upon the mighty St. Lawrence, carrying ocean-going vessels, they will say, “We would not have missed this trip for many times its cost.”

The rates given hereinafter are slightly higher than those first talked



boats to hotels and return, sight-seeing trips at Toronto, Quebec, Montreal and side trip from Quebec to Ste. Anne de Beaupre and Montmorency Falls, all luncheons and dinners; rates provide for two persons to each stateroom on boats, two persons to each hotel room, rooms without bath at the Queen's Hotel at Toronto, rooms with bath at the Chateau Frontenac at Quebec, two persons to each lower berth, Montreal to Detroit. Persons desiring exclusive use of rooms or berths will have to pay additional charges. These rates do not include tips.

Children five years of age and under twelve years will only be charged half fare on trains and steamers. These rates will be quoted upon application.

Your friends are welcome to enjoy this trip with you.

A deposit of \$25.00 per person is required with reservation, \$25.00 May 1st, \$25.00 June 1st and the balance July 1st. Transportation will be mailed to your home address.

Address all communications to F. E. Ederle, care The Travel Bureau, 127 Ottawa Avenue, N. W., Grand Rapids, Michigan.

### ***Metal Branch National Hardware to Meet at Philadelphia, May 8 to 10.***

The Thirteenth Annual Meeting of the Metal Branch of the National Hardware Association of the United States will be held at the Bellevue-Stratford Hotel, Philadelphia, May 8 to 10, and the following program will be carried out:

Thursday, 8:30 p. m.—Registration.

Friday, 10:45 to 12:45 a. m.—Business session, address by Mr. Samuel Vaucrain, President, Baldwin Locomotive Works.

Friday, 6:30 p. m.—Dinner-Smoker, to be addressed by prominent speakers including, if possible, General Smedley D. Butler, formerly of the United States Marine Corps, now Director of Public Safety of the city of Philadelphia.

Saturday, 9:30 a. m.—Business session.

Saturday, 12:15 p. m.—Automobiles will convey delegates to Betzwood Farms Inn, where luncheon will be served and then a visit will be paid to Valley Forge, including Washington's Headquarters Memorial Chapel.

In connection with the meeting the following named men have been appointed by Chairman Donlevy on the committee of entertainment:

F. J. McNeive, Chairman, W. F. Potts' Son & Company; W. S. Stephenson, American Rolling Mill Company; S. H. Truitt, United Alloy Steel Corporation; M. L. Wolfe, Berger Brothers Company; R. L. McHale, David Lupton's Sons Company.

At previous meetings some of the delegates have gone home immediately after the adjournment of the Saturday morning session, but it is the desire of the Philadelphia members that this year all in attendance should remain over and attend the luncheon and take the trip to Valley Forge planned for "Saturday afternoon."

The committee will provide proper entertainment for the ladies who will accompany the delegates and it is therefore particularly suggested that members bring their wives and daughters with them to Philadelphia.

### ***New York State, Sheet Metal Men to Convene at Syracuse, April 30.***

The program for the New York State Sheet Metal Contractors' Association Convention will be held at Syracuse, New York, Wednesday, April 30, 1924, at 308 Larned Building, corner of East Genesee and Warren Streets, Eastern Standard time (one hour behind daylight saving time).

9 a. m.—Credentials, enrollment.

Convention called to order.

Address of welcome by H. E. Hessler of Syracuse.

Response by President of State Association.

Report of Credentials Committee.

Appointment of committees.

Reports of President, Secretary and Treasurer.

Minutes of original meeting and directors' meeting.

"Necessity of an Organization," by Edwin L. Seabrook, Secretary of National Association.

"What an Organization Can Do," by L. F. Bannon of Kingston, New York; W. E. Green, of Utica, New York.

12:30 p. m.—Luncheon in hall as guests of the Syracuse Sheet Metal Contractors' Association.

Between bites the various committees will prepare their reports.

1:30 p. m.—Afternoon session opens.

"Cost Records—How to Segregate Overhead," by an unnamed expert.

"Warm Air Heating," by Thomas Woodard of the Rochester association.

"Selling Warm Air Furnaces," George Stickler of the Poughkeepsie association.

"Handling Copper and Zinc," general discussion.

"Apprenticeship Question," by E. A. Scott.

"Compensation Insurance," by a member of the Buffalo association. Reports of committees.

"The Labor Problem," by Royal H. Bradley of Syracuse on "Closed Shop," and an expert from Buffalo on "Open Shop."

Election of officers.

Selection of time and place of next convention.

Adjournment (or recess, if members wish an evening session to continue discussions).

If evening session is held, it is suggested that a general round table discussion shall be held on questions of interest, such as:

The labor question; methods of charging labor, materials, expense; advertising—individual and cooperative.

At all sessions short and lively discussions are requested on all the subjects on the program.

All sheet metal contractors and employing tinsmiths and furnace men are invited to be present to realize that this is *their* meeting and that they should take an active part.

Questions will be welcomed.

## Sheet Metal Man Can Pick Up Much Repair Work at Excellent Profits in Agricultural Communities.

*O. W. Kothe Says Number of Large Manufacturing Plants Who Turn Out Nothing but Sheet Metal Products Would Astonish Average Sheet Metal Man.*

Written Especially for AMERICAN ARTISAN by O. W. Kothe, Principal, St. Louis Technical Institute, St. Louis, Missouri.

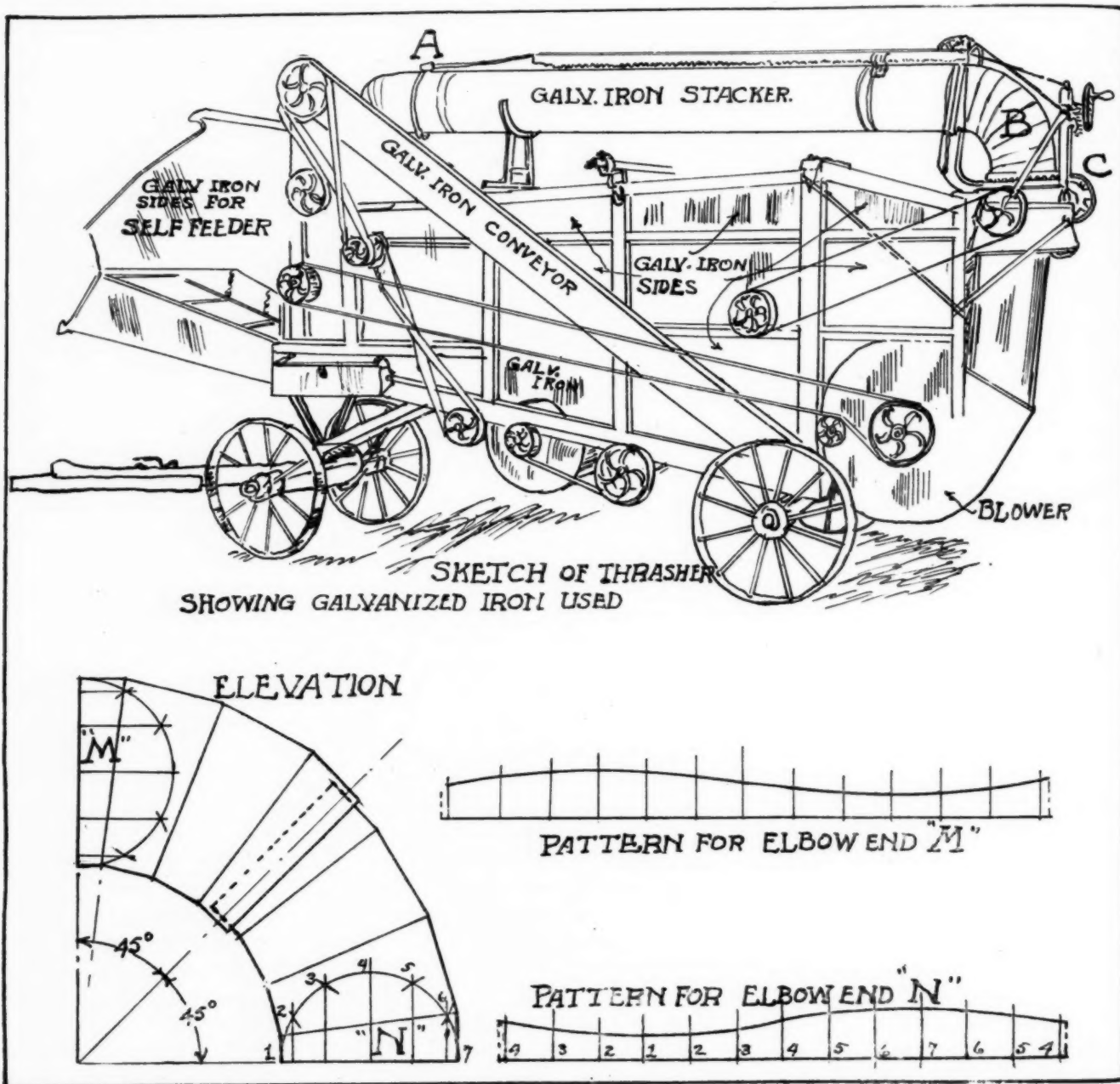
**I**N A former article we mentioned about agricultural sheet metal work, and at this time we should add that the average country town tin shop would be surprised at the amount of sheet metal specialty work that finds its way to him from surrounding farmers. There are hog watering tanks, feed cookers, indi-

vidual chicken equipment and watering tanks, and what not else. In addition, take thrashing machines, some makes have considerable sheet metal work on them, and every year some of this needs repairing or new parts.

The sketch we show in this drawing is a copy of the Racine

Thrashing Machine Company's product, where all the sides, the self-feeder, the blower, the conveyor and the stacker are all made of sheet metal, as well as the fan which separates the chaff from the grain, and at times the shakers are also made of sheet metal.

This is only an example of the



One of the Many Instances Where Sheet Metal Repair Men Will Find Much Remunerative Work.

abundant work such machines require, and if a person would make a thorough search, many additional items could be added. The idea is that, although the country town tinner cannot make these because of the patent right, he can speak for their repairs. It works this way: Farmers and thrashing machine operators will go to the implement shop when they need any special piece of their equipment and have it ordered from the factory. Now, if the sheet metal shop was on its job, it would get in touch with all these folks who use sheet metal and say in this way: "Mr. Jones, you will need some repairs on that machine; now that is my line of work. It will make me a small profit and save you at least the implement dealer's profit, so that we both benefit by keeping your work here at home." Along this suggestion, many side avenues can be developed and it is not the idea to infringe on anybody's right, but in getting work that you have a right to and that ordinarily goes out of town.

Take, for example, the elbow B of our thrasher. It wears out, becomes bruised, or will stick because of obstructions getting between the swivel, which often warps at the fitting so as not to be used in other seasons. Now, that fitting would be made similar as we show in the elevation below, which is made of two 45-degree angles, each containing four gore pieces. The one is a trifle larger than the other so as to telescope while raising the stacker at A. The elbows will slip together and so enable the stacker to raise up to about a 60-degree angle. The turning of the stacker is done by cog wheel arrangement as at C, which enables swinging the stacker in any position. Otherwise the elbows are of a simple nature and can be made in any shop, as well as the deflector for regulating the flow of straw at A. These deflectors are made in different designs, but are of a simple nature, the same as most of the other work on these machines. Even though the work is straight and requires very little complicated pattern drafting, that should not cause

a shop to stay away from it when repairs are needed.

Take the elbow we have designed, two different diameters are used, as sections "N" and "M" show. This makes the angle "M" of a larger circumference than the one at "N;" otherwise the laying out of them is identical. We figure the circumference to suit the diameter of elbow and place its measurement as 4-4 in pattern "N." Then we erect stretch-out lines and from each point in the miter line where the lines in section "N" intersect, bring over horizontal lines to intersect those in stretchout of similar number. This enables sketching in the miter cut line as shown. The same holds true with the development for the pattern "M," only here the length of lines are picked from the elevation by means of dividers and set in the pattern, since it is more convenient in this case than to project them.

There are several other problems of interest on these machines that we shall take up, but all the straight work, such as the panels and the sides and much of the internal equipment, as well as the fan and self heater, conveyor, etc., which is all of the straight work, we do not propose to dwell on, since most anybody could fill in new panels or make these relatively simple fittings. Country town shops should encourage their tanners to look into the design and development of agricultural sheet metal work, so they will be perfectly familiar with their operation and purpose. In addition, employers should get in touch with all those folks who have any sheet metal work on the farm and tell them the service that you have to offer, because in that way both of you benefit by the extra salesmanship you put forth.

#### **Revised Net Price List on Milcor Building Products Now off Presses.**

The revised net price list on Milcor sheet metal building products of the Milwaukee Corrugating Company under date of April 15th has been issued.

#### **Master Sheet Metal Contractors' Association of Wisconsin Holds April Meeting.**

The April meeting of the board of directors of the Master Sheet Metal Contractors' Association of Wisconsin was called to order at 3:30 p. m. at the Builders' and Traders' Exchange by President William Gehrke with a good attendance.

A motion was made by Alfred Goethel and seconded by Carl Anderson that the Secretary, in response to a telegram, write a letter to C. C. Tolg, Waukesha, wishing him a speedy recovery from his illness which has confined him to his bed. The motion carried.

A motion was made by Paul Bier-sach and seconded by R. Jeske that the Secretary send a monthly report to each member of the association relative to the meetings of the board of directors, together with other matters of interest, for the good of the association. Also one letter each month to all registered architects in the state of Wisconsin setting forth the merits of sheet metal and urging a greater use of it on all buildings. The first four letters are to deal with cornice work and the others as the board of directors may decide from time to time. This motion carried.

Under the "start something hour" brought up at the state convention by E. L. Seabrook, a series of letters were presented showing some very good material for increasing the membership in the association. These were handed over to the Secretary for study in getting out some literature for a membership campaign.

#### **F. M. Hasbrouck Will Build New Sheet Metal Works in Oshkosh.**

A new sheet metal works will be built at 531 Main Street, Oshkosh, Wisconsin, by F. M. Hasbrouck, who has sold his building at 529 Main Street to other interests. Building and machinery will cost about \$25,000.

Advertising precipitates the chemical reaction called results.



## Indiana Private Dwelling Formerly Covered with Slate Now Roofed with Sheet Copper.

*John C. Henley, Tanner & Company, Indianapolis,  
Says Gutters and Down Spouts Are Also of Copper.*

IT IS particularly interesting and gratifying to know that the everlasting metals are gaining such rapid headway in displacing other forms of roofing, such as wood, slate and numerous other forms susceptible to deterioration from the summer sun's rays, the effects of winter's frosts, together with drenchings received during the fall and spring.

In spite of the fact that an everlasting metal roof does cost more to

dwelling, Mr. Henley states, was formerly roofed with slate. The owner has, however, seen the light and has had the slate roof replaced by one of sheet copper. The gutters and down-spouts are also made of copper.

It is just such examples as this that instill confidence and prove the desirability of placing proper protection where it will render the greatest benefit.



Dwelling in Connersville, Indiana, Formerly Covered with Slate, but Now Roofed with Sheet Copper, the Gutters and Down-Spouts Also Being of Copper.

put into place than a roof made of other materials, the better class of homes are gradually being roofed with the everlasting materials; the associations back of these metals are convincing the home owner that it is the greater economy to use their products.

John C. Henley, Vice-President and Treasurer of Tanner & Company, wholesale tin plate, sheet iron and metals, Indianapolis, Indiana, sent AMERICAN ARTISAN the accompanying illustration of a dwelling at Connersville, Indiana. This

These examples are an inspiration to the local sheet metal contractor and to the producer of the metals.

They are the forerunners of what must eventually be the consensus of opinion with regard to the properly roofed dwelling and many other instances where permanence is required.

The substantial citizenry of the country—the home owners—must be the aim of the sheet metal man, and the illustration shown with this article proves that these men are on the right track and progressing.

## St. Louis Technical Institute Issues New Directory of Home Study Courses.

To the man who is anxious to increase his knowledge and thereby fit himself for greater responsibilities, the new Directory of Home Study courses offered by the St. Louis Technical Institute, St. Louis, Missouri, of which O. W. Kothe is the Principal, will be especially interesting.

The 1924 edition of the directory is particularly comprehensive in its outline of the courses taught by the St. Louis Technical Institute.

It has designed its courses in sheet metal cornice work, pattern drafting, heating and ventilating engineering, business administration, advertising and many other subjects with a view to help the young man who wishes to receive intelligent guidance in studying the field of industrial endeavor which he wishes to pursue as a life's work.

Full details may be attained and copies of the directory can be had by writing either to AMERICAN ARTISAN or to St. Louis Technical Institute, St. Louis, Missouri.

O. W. Kothe, who is Principal of the Institute, it will be remembered, is the author of the sheet metal pattern page which appears in AMERICAN ARTISAN each week.

## Illinois Zinc Moves New York Office—E. S. Gellatly Resigns as General Sales Manager.

E. S. Gellatly, for the past five years general sales manager of the Illinois Zinc Company, has resigned. The business of the company in the East will be looked after by its New York office, it is announced.

Howard Mellor, who has been with the company for the past twelve years, has been appointed eastern sales manager. Beginning May 1st, the New York office will be moved from 280 Broadway to No. 2 Rector Street. This change in location will effect a more convenient location for the company's representative to meet the metal trade.

**J. P. Byrne and William A. Sladek  
Have Charge of Kansas City Branch  
of Berger Division of United Alloy.**

The Kansas City Branch of the Berger Division of the United Alloy Steel Corporation is now under the management of J. P. Byrne and William A. Sladek. Mr. Byrne has been with the St. Louis Branch for nearly nine years and was recently transferred to the Kansas City Branch. Mr. Sladek has been with the Kansas City Branch since it was established. He has been connected with the steel industry since 1906.

H. L. Sosenheimer, retiring Branch Manager, who resigned because of ill health, has been with the company in various capacities since 1893, and has a host of friends in the sheet metal trade.

**Incident to the Zanesville, Ohio,  
Sheet Metal Meeting.**

In the account of the Zanesville, Ohio, sheet metal meeting held recently credit was given in AMERICAN ARTISAN, page 41 of April 19, to the Zanesville local. This, however, was incorrect as the Zanesville meeting was that of the Sheet Metal Contractors' Association of Ohio. The report incorporated a sales letter which the Ohio state association had prepared for the sheet metal contractors of fourteen unorganized cities in Ohio.

**R. M. Nicholson, Advertising  
Manager of United Alloy Steel,  
Presented with Diamond Pin.**

R. M. Nicholson, who has served as Advertising Manager of the Berger Manufacturing Company and the United Alloy Steel Corporation for nine years, has associated himself with the Union Metal Company, also at Canton, Ohio.

Some of his many friends in the former company presented him with a diamond tie pin as a token of their esteem, wishing him the fullest possible measure of success in his new work.

The house that advertises believes in itself, its products and its future.

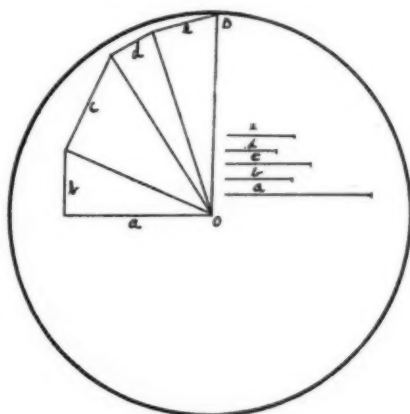
**At Last! The Real Solution  
to a Vexing Problem**

Here's what William Scott, Juniata, Pennsylvania, says about that circle problem:

TO AMERICAN ARTISAN:

While the article by A. A. Allen contains both rhyme and reason, his diagrams are too complicated for ordinary purposes.

To construct a circle with area equal to the sum of two or more given circles, take the radii of the



William Scott Reduces Amount of  
Work Necessary to Solve Frye's  
Circle Problem.

given circles, a, b, c, d, e, etc., respectively, and construct right triangles as shown in the diagram. Then the line OD will be the radius of the required circle, whatever the number of given circles.

This principle, which is based on the Pythagorean theorem, has many practical applications. For instance, if the given circles are warm air pipes, the line OD will be the radius of the cold air return.

WILLIAM SCOTT.

Juniata, Pennsylvania.

**Travelers' Auxiliary of Ill-  
inois Sheet Metal Contractors  
Appoints Board of Directors.**

The Traveling Salesmen's Auxiliary to the Illinois Sheet Metal Contractors' Association has now appointed its board of directors for the ensuing year, announces William P. Laffin, of Tuttle & Bailey, Chicago, who was elected Vice-President of that organization at the Peoria convention held two weeks ago.

The board of directors for the Travelers' Auxiliary is made up of the following named men: A. H. Schiewe, Berger Manufacturing Company, Canton, Ohio; H. J. Niehaus, Follansbee Brothers Company, Pittsburgh, Pennsylvania; J. Harvey Manny, The Manny Heating and Supply Company, Chicago; R. B. Strong, Homer Furnace Company, Coldwater, Michigan.

The report of the Treasurer, submitted at the recent Peoria meeting, showed a balance of \$176 on hand and a total membership of ninety-four. The membership report shows an increase of seven members over that of a year ago.

**American Zinc Institute  
Will Hold Business Sessions  
at St. Louis, April 28 and 29.**

The Sixth Annual Meeting of the American Zinc Institute will be held in the Hotel Chase, St. Louis, Missouri, Monday and Tuesday, April 28 and 29. Both days will be devoted to the business of the Institute, including the election of seven directors, and all members are urgently requested to attend the meetings.

**Better Results Argument  
Now Dominating Factor  
in Sales Field.**

It is generally understood that the appeal of labor saving is being subordinated to that of the improved results produced by the uses of modern electric appliances in selling these devices.

The first necessity is to arouse women's interest and desire for these improved appliances. Aching backs, tired and roughened hands, perspiring and wrinkled faces were formerly featured to enlist active support of the women folk.

Now that manufacturers have the backing of women, a better advertising appeal—the improved results obtained by the use of these appliances—is being used. And full advantage of this fact should be taken by retailers when advertising or making window displays.

## Landis Award Enforcement Committee Believes Wage Increases Will Cause Building Slump.

*With Operations Conducted on Present Scale Year's Volume of Building Will Show Tremendous Activity.*

SOMETHING of the desirability of Chicago working conditions, particularly with reference to the building trades, is indicated by the great number of applications for work being received by the Citizens' Committee to Enforce the Landis Award from all the leading centers of the country and from all states of the union. Carpenters and other workmen of proved fitness want to work under the Landis standard, realizing that they will receive the protection and just consideration of the Citizens' Committee at all times.

Despite the increasing call for mechanics, the public continues to show hesitancy in beginning operations on a big scale until the building costs question is definitely settled along satisfactory lines. Any further increase in wages and general costs, men close to the heart of things say, will result in a big slump in activities, but with operations conducted on the existing scale, they believe the year's volume of building will be in keeping with the tremendous activity of the last two years, or since the Citizens' Committee began to function.

"The offices of Landis architects are crowded with work, ready to be given out to contractors as soon as it is determined that there will be no further increase in costs," said F. W. Armstrong, general manager of the committee. "With the exception of two or three branches, the building trades are satisfied with prevailing wages, but if they obtain the 25-cent-an-hour boost they are demanding, the raise will be demanded by all the other branches, with the result that building costs will be given a boost that the public will not assimilate. It has been estimated that a blanket increase of 25 cents an hour to the basic trades would mean from \$30,000,000 to \$50,000,000 out of the pockets of the building public. With present conditions

undisturbed, we feel, there is every prospect that the present building season will be notable in every way, with steady, remunerative work for all classes of workmen."

### Another Proof of Its Power to Produce.

TO AMERICAN ARTISAN:

Please discontinue my advertisement offering cornice brake for sale. I am sorry that I did not have seven or eight of them to sell, as I received an inquiry even before AMERICAN ARTISAN reached me this week.

You can bet AMERICAN ARTISAN reaches the people who are in the business. So far I have received nine inquiries for the brake.

C. C. COON.

Wauseon, Ohio.

### Notes and Queries

#### Tanks.

From Neosho Plumbing, Heating and Manufacturing Company, Neosho, Missouri.

We should like to know who makes 5-gallon tanks with pump and gauge.

Ans.—The Geo. W. Diener Manufacturing Company, 400 North Monticello Avenue, Chicago, Illinois.

#### Slip Joint Ceilings.

From Rolland J. Johnson, 70 West Side Square, Monmouth, Illinois.

What is the name of the concern making slip joint lock metal ceiling?

Ans.—Milwaukee Corrugating Company, Milwaukee, Wisconsin.

#### Repairs for "Fowler" Bicycle.

From Roanoke Hardware Company, Roanoke, Illinois.

Where can we purchase a two-piece bicycle crank hanger to fit a "Fowler" bicycle?

Ans.—Paulina Bike Shop, 1349 North Paulina Street, Chicago, Illinois.

#### Lamp Burner.

From G. O. Sapp, Tallula, Illinois.

Who makes a small lamp burner?

Ans.—E. Miller and Company, Meriden, Connecticut.

#### Steel Stamped Seats.

From Cecil C. Coon, Wauseon, Ohio.

Please advise where I can get steel stamped seats for merry-go-rounds for children.

Ans.—Advance Stamping and Specialty Company, and Moore and Company, Grand Avenue and Franklin Street; both of Chicago, Illinois.

#### Wood Wash Boiler Handles.

From Robert Neussinger and Brothers, 28 Market Place, Baltimore, Maryland.

Please furnish us with the names and addresses of several manufacturers of wood wash boiler handles.

Ans.—Berger Brothers Company, 237 Arch Street, Philadelphia, Pennsylvania; Bogert and Hopper, Incorporated, 57 Barclay Street, New York City; E. B. Estes and Son, 364 5th Street, New York City; E. J. McAleer and Company, 1422 North 8th Street, Philadelphia, Pennsylvania; H. A. Stiles and Company, 166-174 Portland Street, Boston, Massachusetts, and Strombeck-Becker Manufacturing Company, Moline, Illinois.

#### Ship Castings.

From Robert Neussinger and Brothers, 28 Market Place, Baltimore, Maryland.

We want to get in touch with several manufacturers of ship castings. Will you please advise us?

Ans.—Atlantic Steel Castings Company, Chester, Pennsylvania; E. T. Fraim Lock Company, Lancaster, Pennsylvania; Pittsburgh Iron and Steel Foundry Company, Pittsburgh, Pennsylvania; John F. Riley Foundry and Machine Company, Charleston, South Carolina; William Wharton, Jr., and Company, Incorporated, Easton, Pennsylvania, and Williams and Wells Company, 253 Fulton Street, New York City.

#### Des Moines Steel Coal Chute Windows.

From Paul and Larson, Odebolt, Iowa.

Please inform us who manufactures the Des Moines Steel Coal Chute Windows.

Ans.—W. H. Taylor Company, 1326 West 8th Street, Des Moines, Iowa.



## Radio Instrument Display Window Which Increased Sale of Other Articles As Well As Making A Direct Profit.

*John Hammer Says Duncan & Goodell Company, Worcester, Massachusetts Gained Many New Customers with Display of Radio Goods.*

**R**ADIO instruments, wonderful sellers in themselves, have proved a great help in selling tools and hardware.

Carpenter's tools such as hand drills, screwdrivers, hammers and saws, together with wrenches and countersinks, received added sales due to the needs for making and setting up of radio sets.

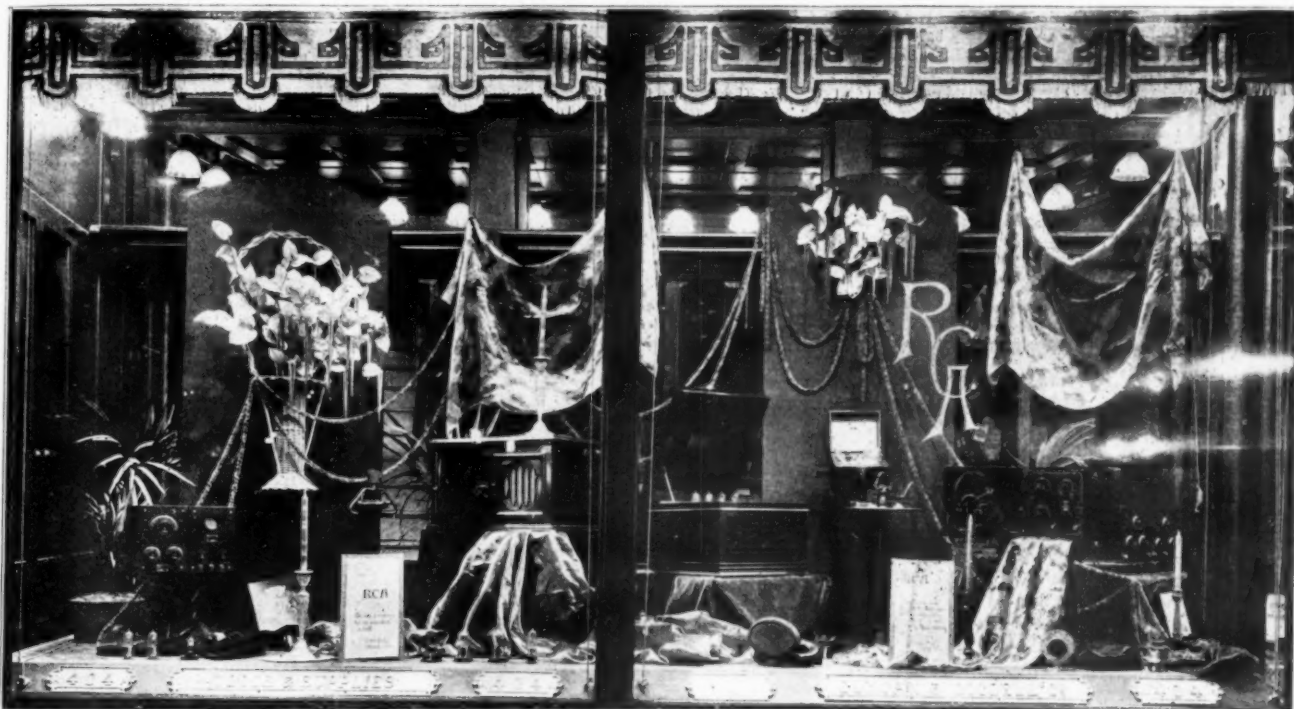
Screws, screw eyes, cleats and

accompanying window display for the Duncan & Goodell Company, 404 Main Street, Worcester, Massachusetts, says regarding radio sets increasing demand for other goods:

"We can say with certainty that radio has brought us scores of new customers, many of whom never realized that we carried the largest line of hardware supplies in central New England."

tion, 701 Grand Theater building, Atlanta, Georgia:

"Careful investigation proves that a man sees at least ten times as much as he hears. In fact, some authorities say that he sees twenty times as much as he hears. What does that mean in selling? Just this: That you can talk to a customer about your article until you are black in the face, but if you fail to



Radio Window Display Which Not Only Brought a Direct Profit from the Sale of the Instruments Themselves, But Also Increased the Demand for Many Other Hardware Articles as Well.

sheet brass are being sold in great quantities to radio users.

Another item effected by radio is wire. The demand for wire for radio antennae or aerials has increased tremendously.

Brass tubing and electric soldering copper are also in demand.

It is known that radio has sold as much hardware as any other special feature used to increase general sales in all the hardware departments.

John Hammer, who arranged the

This is only speaking of the effect which the sale of radio apparatus has had upon creating an increased demand for other hardware articles.

### *Exhibit Space Now Available for Southeastern Retail Hardware Convention.*

The following letter was received from Walter Harlan, Secretary-Treasurer, Southeastern Retail Hardware and Implement Associa-

show him the article, your chance in making the sale is one in ten or one in twenty. There is one other sense to take into consideration—the sense of feeling. Investigation has proved conclusively that by getting the article into the hands of the buyer, you create in his mind a sense of possession which practically doubles your chance to make a sale.

"About 800 hardware and implement dealers from Alabama, Florida, Georgia, and Tennessee will be in Atlanta, Georgia, May 27, 28 and

29, to attend the Southeastern Retail Hardware and Implement Association Convention and Exhibit. This will afford you an opportunity to display your line and to meet the dealers. Seven hundred and ninety-eight orders were placed with last year's exhibitors at the convention amounting to \$320,801.46. Will you be on hand this year with an exhibit of your line to get your share of the orders? If interested we will send you floor plan and a list of concerns who have already taken space."

***National Chamber of Commerce Will Consider Trade Association Activities at Convention, May 6.***

Trade associations and their activities are to receive attention at the forthcoming annual meeting of the Chamber of Commerce of the United States at Cleveland, May 6 to 8.

Three separate proposals concerning trade associations have been submitted by member organizations of the national chamber for consideration at the convention. The substance of these proposals and the organizations that submitted them, follow:

The Memphis Chamber of Commerce proposes that the national chamber should advocate creation of a commission which would define the rights of trade associations and their members in all respects, including their rights to discuss operating expense, sources of supplies for materials, prices, trade competition, etc. A study of anti-trust laws and of the Federal Trade Commission's powers and activities would be included. The purpose would be to establish recognized principles which would remove handicaps under which trade associations now operate, through fear that they may violate some law, rule or regulation and be called before a commission or the courts upon a criminal or civil charge the existence of which, regardless of the merits, is detrimental.

The Southern Central Division of the national chamber recommends

that all possible steps be taken to obtain elimination of obstacles and uncertainties which interfere with the most effective carrying out by trade associations of their function of disseminating information.

The National Coal Association proposes that the President of the United States be asked by the national chamber to direct the Attor-

ney General to institute a test case of such a character that it will determine the legal status of activities of trade associations in gathering and giving to the public statistical information concerning production, distribution, cost and prices when no improper private use of such statistical information by the association or its members is alleged.

***F. E. Muzzy, Stricken With Cerebral Apoplexy Passed Away in His Springfield Home April 23.***

*Spent Many Years Selling Hardware and Guns to Western Merchants. Retired About Ten Years Ago.*

THE many friends—and you could count them by the hundreds—of Fred E. Muzzy will regret to learn that he passed away, stricken by apoplexy, Wednesday, April 23rd, at his home, 59 Garland Street, Springfield, Massachusetts.

Fred Edson Muzzy was born September 7, 1861, in Jamaica, Vermont. Four years later his parents

In 1882 Mr. Muzzy felt the "Dakota craze" and went with the rush to take up land in South Dakota, securing a homestead and a tree claim, or 480 acres in all, and when he had "proved" two quarter sections he found that he could not sell them for a dollar an acre.

In the meantime he secured employment in a retail hardware store in Westport, South Dakota, near Aberdeen, and for some time all he received for his services was his board and room. In 1886 he took his first position as a traveling salesman with the Hicks, Trask Hardware Company of Aberdeen, South Dakota, at a salary of \$50 a month and expenses. A year later he became connected with A. F. Seeberger & Company of Chicago, remaining there two years, after which he joined the Simmons Hardware Company. He remained with that company 11 years, leaving to become associated with the J. Stevens Arms & Tool Company, and remained there eight years, during which time he became Vice-president and General Manager.

Close application to his duties, however, caused ill health and he found it necessary to give up his work. Although the physicians said that he would not recover at that time, his health became better and since then he had traveled much. He visited every State in the Union and nearly every large city, many parts of Canada and the Maritime Provinces as well as 15 foreign



Fred E. Muzzy.

moved to a farm near Geneseo, Illinois, where he lived until he was 21 years old, attending the public and high schools until he was 18 years old and after graduation teaching district schools for two years—all the time helping his parents with the work on the farm. His parents are both buried in Geneseo and in 1916 Mr. Muzzy erected a beautiful memorial chapel in Oakwood Cemetery there in their memory.



countries. Seven years ago he spent five months in China, Japan and the Philippines. Every year he made one or more trips to the Middle West and sometimes to the Pacific Coast.

He became greatly interested in the raising of silver foxes on Prince Edward Island and was President of the Interstate Black Fox Company, Limited, an enterprise which he himself started for the purpose of breeding high-grade silver black foxes and preparing and selling fine fox furs in pelt form. He was also President of the Bankers' Amalgamated Silver Black Fox Company, Limited.

For years Mr. Muzzy did considerable writing for newspapers and hardware trade journals under the pen name of "Ed Ford." Many of his articles were first published in AMERICAN ARTISAN AND HARDWARE RECORD. He was a member of the Rotary Club, the Nayasset Club and other clubs and societies—social, civic and philanthropic. He was a 32d degree Mason, a Knight Templar and a member of Melha Temple of the Shrine. He was a director of the Eastern States Agricultural and Industrial Exposition.

Mr. Muzzy leaves on brother, G. R. Muzzy, 300 Myrtle Avenue, Elmhurst, Illinois, and one sister, Mrs. R. B. Lyon, Geneseo, Illinois. The burial was held in the family lot, Oakwood Cemetery, Geneseo.

### **Nebraska Ironmonger Publishes Complete Report of State Hardware Convention.**

The March issue of the *Nebraska Ironmonger*, which is the organ of the Nebraska Retail Hardware Association, has just arrived at our Editor's desk. It is a publication of 56 pages of the usual size and contains a complete report of the proceedings of the annual convention of the Association.

To George H. Dietz, the able Secretary of the Association, who also serves as Editor of the *Ironmonger*, is due a lot of credit for the newsy little publication.

It pays to advertise—regularly.

## **Hamp Williams Gives Michigan Retail Hardware Men His Definition of Success**

*Tells What Makes for Success or Failure in the Hardware Business and How to Detect the Latter.*

**T**HERE are perhaps as many divergent definitions of success as there are individuals, but Hamp Williams struck the keynote of success when he told the Michigan Retail Hardware men in convention at Grand Rapids that the foundation of success in the final analysis is happiness.

Hamp Williams, of course, as everyone knows, is the President of the National Retail Hardware Association.

### **What Makes Success or Failure for the Hardware Business?**

Success comes through effort, failure comes without it. It requires a combination of many kinds of effort to make success in the retail hardware business, and the neglect of any one may cause failure.

Permanent success is attained by a continuation of duties and effort. Temporary success is here today and gone tomorrow, for which there are many causes; some are avoidable and some are not. Sickness many times is due to intemperance or indiscretion, fires caused by neglect, avoidable wastes, extravagance, indifference, ugly temper, speculation, and laziness—all contribute to failure.

It my business starts on the decline, I get busy trying to find the cause; read the opinions and experiences of other hardware men which are published in the hardware journals. I get a little closer to my employes and to my trade. In a short time I find the trouble—apply the remedy.

### **How to Detect Declining Business.**

At this point you may ask: "When is it you find that your business is on the decline?" When my sales for this January just past are less than they were in January, 1923, or January, 1922.

Local conditions must be considered, of course, and they can be ascertained by asking our local dry goods merchants, shoe dealers, grocery dealers—they are very good barometers. If I find their sales are normal and mine are below, I know there is something wrong with both my business and myself. I may not get along with my competitors—there are some who do not, but there is no reason why I shouldn't go hand in hand with merchants in all other lines of merchandise in my town, and that's what I do. From them I get a great deal of business, either directly or indirectly.

In general, success is attained in the retail hardware business by first having enough capital to open a small assorted stock of good hardware bought at the right prices and properly displayed in a good town, in a good location.

### **Learn Value of Time.**

To succeed we must learn the value of time and use a portion of it every day in

reading the kind of literature that carries us in the direction toward the end to which we hope to reach. We must please our customers and friends, and know how to reach them. This is universal. A good, honest, firm, warm handshake is a good beginning; to our enemies it is the beginning of peace; to friends it is a guarantee of continued love and friendship; to strangers it is an evidence of character and good will. A friendly grip of the hand is a token of friendship and brotherly love, and oftentimes distinguishes a friend from a foe.

The wealth of conscience is of more value than money. It is an asset that the robber cannot take from us. It is an evidence of God in our nature and directs us in the right way of living and points out the duties we owe to our Creator, our country, our neighbor, our family, and ourselves, and if properly cultivated will add profit and pleasure to us while living and will bring God to us in all His glory when we come to die.

There are many, many things that help us succeed in business—money alone will not do it.

### **Causes for Failure.**

Failure may come from some of the following causes: Over-capitalization, merchandise stocked of inferior quality, poorly displayed in a poor location in a poor country, poorly purchased and sold at no profit, or an effort made to sell at too great a price; but sometimes we fail because we do not have the good will of our people.

Friends may advise and enemies despise us, but after all, the whole thing is up to us whether we succeed or fail.

There are millions who are earning their daily bread by the sweat of their brow, and are extremely happy in so doing—that to them is success. I can think of no mortal so unhappy as those who have plenty of money and nothing to do.

If at the end of the year we can look back and count numerous things we have done for others to make their burdens lighter and living better, that's success; and in addition to that, if after taking stock of our hardware and after having paid all our just obligations, we find that we have a substantial dividend honestly earned, that is an added success. On the other hand, if at the end of the year we find a large accumulation of cash profits and cannot recall a single act of kindness or charity that we have rendered others, to my mind and my way of thinking we have made a failure; but we can overcome some of it by sharing our profits with the men who help us make them. That is an act of kindness and good business.

### **No Man Can Tell You How to Succeed.**

Lead in everything you undertake. Profit by the experience of others, and remember that no man can tell you how to succeed. No two succeed alike, no two fail alike, no two act alike, and no two are alike, but there are well defined principles in the retail business which we must observe. Be yourself with all the



improvements over nature that you can possibly add. Look your very best and act your very best at all times and under all circumstances, and make your word as good as your bond.

Nature prepares us for the different stages of life. As we approach manhood the worldly pleasures appeal to us most. At middle age we are more settled and wealth appeals to us most, but old age brings to all of us the realization of life as it should be lived, for health and for God.

Finally, the foundation of success is real happiness, and in order to be happy we must be true to God, true to our country, true to our friends. "Above all, to thine own self be true; and it must follow as night the day; thou canst not then be false to any man."

After all, a happy home and the reflection of a well spent life is the greatest success that any man can attain.

### ***Control of Luetkemeyer Company, Cleveland's Oldest Hardware House Bought by Bingham Men.***

The controlling interest in the Luetkemeyer Company, one of Cleveland's leading wholesale hardware houses, has been bought by Henry L. Thompson, President of the Bingham Company, Cleveland, and of the Bostwick-Brown Company Toledo, and W. W. Knight, Vice-president and Secretary-Treasurer of the latter company.

Harry Hutchisson, president of the firm, will continue in that capacity and states that the Luetkemeyer Company will continue to operate as before. There will be no change in the corporate title, nor are there at the present time any intentions of drastic organization changes affecting the staffs or lines carried.

Other officers of the Luetkemeyer Company will be Harry D. Cram, Vice-president and Treasurer; and W. W. Knight, Secretary. Mr. Cram is Vice-president of The W. Bingham Company.

### ***Thomas W. Dixon, Secretary of Hardware Association of the Carolinas, Has Passed Away.***

It is with deep regret that we announce the recent death of Thomas W. Dixon, Secretary-Treasurer of the Hardware Association of the Carolinas. Mr. Dixon was one of the most prominent men among the Southeastern hardwaremen and also took an active interest in philanthropic and religious work.

### ***How Much Do Your Employees Steal from Your Store?***

Of the eighteen possible causes of stock shortages and inventory losses in retail stores, the one on which the least stress is said to be laid is theft by employees who sell the goods. But this form of loss forms a larger part of shortages than is often supposed and where least suspected. The head of a service system explained that the work of his service included the two-fold function of detecting theft and improving the store service. In one instance the inventory loss was reduced in a single year from 5 per cent to 1 per cent after it had been demonstrated that inside stealing had been going on.

### ***Coming Conventions***

New York State Sheet Metal Contractors' Association, 308 Larned Building, Syracuse, New York, April 30, 1924. John J. Yager, Secretary, Buffalo, New York.

Metal Branch of National Hardware Association, Bellevue-Stratford Hotel, Philadelphia, May 9 and 10, 1924. W. H. Donlevy, Chairman, Philadelphia, Pennsylvania.

Panhandle Hardware and Implement Association, Amarillo Hotel, Amarillo, Texas, May 12, 13 and 14, 1924. C. L. Thompson, Secretary and Treasurer, Canyon, Texas.

National Association of Stove Manufacturers, Hotel Astor, New York City, May 14 and 15, 1924. Allen W. Williams, Temporary Secretary, 52 West Gay Street, Columbus, Ohio.

Southeastern Retail Hardware and Implement Association, composed of Alabama, Florida, Georgia and Tennessee. Convention and Exhibition, Atlanta, Georgia, May 27, 28, 29, 1924. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta.

Western Warm Air Furnace and Supply Association, Savery Hotel, Des Moines, Iowa, June 11, 1924. John H. Hussie, Secretary, 2407 Cuming Street, Omaha, Nebraska.

National Retail Hardware Association Congress, San Francisco, California, June 16, 17, 18 and 19, 1924. Herbert P. Sheets, Secretary, Indianapolis, Indiana.

Hardware Association of the Carolinas Convention, Wrightsville Beach, North Carolina, June 17, 18, 19, 1924. T. W. Dixon, Secretary-Treasurer, 717-718 Commercial Bank Building, Charlotte, North Carolina.

Convention National Association of Sheet Metal Contractors of the United States, Raleigh Hotel, 12th and Pennsylvania Avenue, N. W., Washington, D. C., June 17, 18, 19 and 20. Edwin L. Seabrook, Secretary, 608 Chestnut Street, Philadelphia.

Michigan Sheet Metal and Roofing Contractors' Outing to Quebec, July 19 to 26, 1924. Frank E. Ederle, Sec-

retary, 1121 Franklin Street, S. E., Grand Rapids, Michigan.

Ohio Sheet Metal Contractors' Association, Southern Hotel, Columbus, Ohio, July 22 to 24, 1924. George F. Mooney, Secretary, 213 First National Bank Building, Columbus, Ohio.

Pennsylvania & Atlantic Seaboard Hardware Association Convention and Exhibition, February 16 to 20, 1925, at Philadelphia Commercial Museum. Sharon E. Jones, Secretary.

### ***Retail Hardware Doings***

#### ***California.***

Paul Kogler has disposed of his interests in the Kogler Hardware Company, Orange, with which he was connected for twenty-five years, to his two brothers, Henry J. and William J. Kogler.

The Martin Hardware Company of Gilroy, in order to accommodate their increasing business, have leased the store room adjoining, formerly occupied by Schilling's candy store, in which they have their new stove department.

#### ***Illinois.***

P. H. Learnard has sold his hardware business at 155 North Vermilion street, Danville, to Otto R. Schultz Hardware Company.

#### ***Massachusetts.***

The Howard Hardware Company of Amesburg has been sold to Oscar T. Gove.

#### ***Michigan.***

The Smith Hardware Company is the name of Portland's newest firm, and its members are Laban A. Smith and Leo C. Lehman.

#### ***Missouri.***

Clyde Stubblefield of Cassville has purchased the hardware stock of J. G. Perkins.

#### ***Nebraska.***

The Lee-Coit-Andresen Hardware Company of Omaha has changed its name to the Lee-Fountze Hardware Company.

#### ***Ohio.***

J. P. Crain, Paulding hardware and implement dealer, who for several years has also conducted a store at Scott, has discontinued the Scott store and is having the stock moved to Paulding where it will be consolidated with that of the local store.

#### ***Oklahoma.***

H. K. Price has traded his hardware stock at Addington to a Mr. Williams of Roosevelt. The new owner will move the stock to Roosevelt.

#### ***Utah.***

W. F. Bowerman has opened a hardware store at 335 Main street, Salt Lake City, which is known as Bowerman's.

#### ***Wisconsin.***

The hardware stock of the J. V. Zweck store at 107 Front street, Beaver Dam, has been moved to 121-123 Front street and consolidated with that of the J. C. Wellenburg Company of the latter location. All business will be conducted under the name of Zweck Wellenburg Company.

The Sell Brothers Hardware Company's store has been reopened with an entire new stock of goods. The store was damaged by fire on March 4th.

## *We All Admit That It Is True, but We Do Not Live Up to the Rule.*

*H. C. Fritz Tells of His Early Training and How He Came to Realize That the Best Is the Cheapest.*

THERE is more than just historical interest in the following article, which was written by H. C. Fritz, Manager of the Reliable Stove Company Division, American Stove Company, covering a period of nearly fifty years in the stove industry. Many of our readers will find added inspiration in the story of the success of the men described therein, and we are sure that the motto with which Mr. Fritz heads his article will appeal to all of you:

### **The Best Is the Cheapest.**

I cannot claim credit for the words of wisdom that head this article. They were written by the builder of the world's first portable stove, who was also America's first advertising man, Benjamin Franklin.

But the thought that these words express has been a dominant factor in my life ever since I can remember. I like the Best of everything that I can afford to buy—the Best cigars, the Best seats at the Best shows, the Best music, the Best of friends.

And, getting down to business, I like to do my Best with every job I undertake. My highest ambition for many years has been to have the organization that I am associated with be known throughout the world as builders of the Best stoves.

### **My First Experience with Stoves.**

And now that we've got down to stoves, I can tell of my first stove experience. It occurred when I was about fifteen years old. My mother, I believe, had become discouraged with her old coal stove and must have told my father that if he wanted her to continue to cook his meals it was up to him to buy her a stove that she could do the job with. Anyway, one bright, sunshiny spring day there arrived at the Fritz home one brand new Adams and Westlake gasoline stove.

Never since that time has anything fascinated me as much as that stove did. I couldn't keep my eyes off it. Every time my mother filled the cups and touched a match to the fluid I was there—watching. And that's when I decided that some day I was going to be a builder of gasoline stoves. It was several years later, however, before I was given the grand and glorious opportunity that I sought.

### **Father Said: "Learn a Trade."**

It was my father's idea that his sons should learn a trade. "Men working at desks," he used to say, "never get anywhere. Learn a trade and your services will always be in demand."

In those days children didn't put their parents to bed and then go out on parties. Until a boy reached the shaving age he didn't have much to say about his future.

At least this was the condition in our home, and so, while I was still in my early 'teens my father apprenticed me out to the Cummer Machine and Engine Company for a period of five years at no salary and under bond to serve the entire time.

I served two years of this apprenticeship and didn't enjoy a day of it. I would have served the entire five years if the company hadn't liquidated the business—which didn't displease me a bit. At that, the reorganized company tried to hold me to my contract, but when convinced that I preferred another kind of work, the principals kindly released me. In later years, however, I have not regretted the training of those two years.

The Cummer Company manufactured stationary steam engines. Every year the company took on two apprentices to be given a five-year training. At the conclusion of this period of time these young men were sent to all parts of the country as sales representatives—they

were capable also of assuming full charge of every detail of installation.

### **Schooled to Sell Steam Engines.**

We apprentices had to attend the company school every morning for several hours. Here we were taught mechanical drawing, higher mathematics, engineering, etc. As I said, this training stands me well today in the reading of blue prints, and the understanding of machine design, installation and operation.

But the thing that worried me most during these two years was the fact that I wasn't earning money. My parents were hard-working people who provided well for their several children, and having done that, had little left for their own comfort and enjoyment. I wanted to help.

In the year 1880 two employees of the White Sewing Machine Company at Cleveland, Ohio, decided to engage in the manufacture of a special type of gasoline burner to be sold to manufacturers of gasoline stoves. These two men were Paul Schneider and Henry Trenkamp, founders of the Schneider & Trenkamp Company, a name that grew to be a by-word in thousands of homes wherein their product was used.

The Secretary of Schneider & Trenkamp was a man named F. A. Mehling, whom I knew slightly. A short time after the Cummer Company had gone out of business I met Mr. Mehling on the street. "Have you a job for me?" I asked. "You bet I have!" he said. And so, with greater joy than ever I had experienced since, I entered the stove business—as an employee in the shipping department of Schneider & Trenkamp at 50 cents a day. That was thirty-six years ago.

The second pay I drew contained an increase of 50 cents a week, and I said to myself: "This is the business for me."

At the end of a few months I was elevated to the imposing rank of shipping clerk, and a few years later was given a position in the general office as correspondence clerk.

### **Opened a Branch Office in Chicago**

This position and others I held until January 2, 1895, when I was



sent to Chicago to open a branch office. Here I was salesman, book-keeper, office boy and janitor. Chicago to me was the biggest thing in the world, and having neither friend nor foe there didn't make it any smaller.

The first sale I made was to Siegel, Cooper & Company. No, it wasn't made as easy as I say it. I was "eased" out of the buyer's office "nicely" several times, and re-entered just as "nicely" one more time than I was "eased" out, on which occasion I got the order.

But as the years passed I built up a host of business acquaintances in the Chicago district—men who since have become my closest friends. In fact, although it is now fifteen years since I sold stoves in Chicago, I still feel more at home in the "loop district" than any other place I know.

In 1902 the firm of Schneider & Trenkamp was taken over by the American Stove Company. Upon the retirement of Henry Trenkamp, Sr., in 1909, I was recalled to Cleveland to assume the managership of the company, which was renamed Reliable Stove Company Division, the name "Reliable" having been the name used by the company for its line of gasoline and gas stoves.

Personally, I prefer sales work to any other kind. And I guess it's because I like people and the good things that people do.

I never have and never could hold the "public-be-damned!" attitude towards buyers of our products. The highest compliment that any person can pay me is to take his hard-earned dollars and spend them for something that my company, with hard, earnest, sincere effort has produced.

I'll make a little bet that whenever you receive a really nice compliment you try your best to return it. So do I. And the only way I know how to return the compliment to "Mrs. John Smith" in Peoria when she buys a Reliable Lorain-equipped gas range is to do everything in my power to make sure that she gets just the finest gas range that her money can buy. But even when that is done it often happens that

someone else ruins your gold-plated intention.

#### **Threatened with a Bald Statement!**

I recall one occasion when I stood in the appliance sales room of a large gas company talking to the department manager. A nicely dressed young woman entered and engaged the floor salesman in conversation. I paid little or no attention to them until she cried: "If I had the man here that built Reliable gas ranges I'd snatch him bald!" Stepping up to her and tipping my hat, I said: "Madam, someone did that to me years ago." If you don't get the point I might as well come right out and state that there are few men that have less need for a comb and brush.

Of course, the young lady was taken by surprise, and when I explained that I was undoubtedly responsible for anything that might be wrong with her Reliable gas range, she actually smiled. I talked to her for some time and finally she admitted that she had purchased a Reliable gas range against her husband's wishes, and to make her home life happier she would like to return it and get the make that *he* preferred.

When she finally left the store I think she was as happy as any woman could be. She listened intently to everything I told her about the good gas range she had purchased, and I'll bet she beat her husband in the argument that night hands down. And what could please a woman more?

One of the first things I learned when I started to sell gas ranges was that the world doesn't stand still, that it travels a lot faster at certain times, and that in the age in which I happened to be living the old ball of dirt was just whizzing around. I learned that the old line of stoves I had thought so beautiful and wonderful when I was working at the factory didn't appeal in that way at all to the prospect who invariably had been shopping around to get the best and most modern stove that his money could buy.

I began to worry the factory with recommendations for improvements,

and when I didn't get quick action I said to myself: "Fritz, if you ever get to be manager of the Company you're going to get out among the trade and buyers and keep yourself posted at all times on what the public is demanding, and then go back to the factory and see that it's made—even better than the public wants it." And I've done just that ever since I became manager of the Reliable Stove Company Division, and I will continue to do it as long as I hold the position—if I have to be pushed around in a wheel chair.

And now to jump back to the words of Franklin. I like the Best that my money can buy because I, too, have learned that, in the long run, the Best will prove the cheapest. I know that I'll take pride in the best thing where I wouldn't in something less good. I know that the man who makes or sells the Best article takes far greater pride in his merchandise and will always go the limit to make good if for any reason the article fails to deliver the Best of service to the buyer.

And, somehow or other, I've come to believe that a vast majority of the people of these United States feel just as I do on this matter or they wouldn't be living in the Best nation on earth.

#### ***Your Job Is Just as Big as You Make It.***

A job is big or little according to the man who is behind it and according to his ideas of service. The individual who is selfish, ready to call what he has done in a half-hearted manner "Good enough" or willing to satisfy himself with the argument that he has done as well as the people around him will never claim a very big job for his own.

This is a wonderful time in which to live! It is a time when men can make their efforts count, and the harder the task the less the competition in doing it.

Every cent's worth of waste about your business is a cent taken out of your net profits. Wilful waste makes woeful want, they say.



# Advertisements Offering Spring and Summer Goods Will Increase Their Sale Many Times.

*The Sale of Copper Wire, Screws, Screw Drivers, Hammers and Countless Other Items Is Stimulated Through Radio Goods.*

THE accompanying advertisement is reprinted from Port Huron, Michigan, *Herald*. It is a typical form of special offer. It is generally conceded that prices should

of shaded would have made the ad stand out more; then, too, the sub-heads would have formed a stronger contrast with the small type.

The ad is very well got up, how-

ever, no good and plausible reason that can be produced as to why he should not carry lines related to his goods.

For instance, a seed rack can very easily be placed in the store and kept filled. Why should a man planting a garden be compelled to

## SUMMER NEEDS AT RIGHT PRICES

August—the Month of Bargains in Summer Hardware—Our Large Stock is Priced at a Great Discount From Regular Prices.

### Refrigerators

Leonard's Cleanable Porcelain Lined Cases.  
25% off from Regular Price on our complete line.

### Porch Swings

Regular Price \$14.00. Clearance Price .....\$9.98  
Regular Price \$19.75. Clearance Price .....\$14.95

### Hammocks

A discount of 25% off will be given on our entire line of hammocks ranging in price from \$2.75 to .....\$7.50

### Screen Doors

Fixtures Included  
2 ft. 8 in. by 6 ft. 8 in. Stained Door. Clearance Price .....\$1.98  
2 ft. 8 in. by 6 ft. 8 in. Varnished Door. Clearance Price .....\$2.50

### 33 1-3 Off On All Base Ball and Tennis Goods

#### Catchers Mitt

D. & M. \$13.50 for.....\$9.00  
D. & M. \$ 3.00 for.....\$2.00  
D. & M. \$ 1.50 for.....\$1.00

#### Fielders Mitts

D. & M. \$1.50 for.....\$1.00  
D. & M. \$3.75 for.....\$2.50  
D. & M. \$4.50 for.....\$3.00

#### Base Ball Shoes

D. & M. \$3.75 for.....\$2.50

#### Masks

D. & M. \$1.75 for.....\$1.20

#### Tennis Rackets

D. & M. \$9.00 for.....\$6.00

#### Tennis Balls

D. & M. 50c for.....33c

#### Golf Balls

Reach Eagle...75c for 50c each  
Dunlap .....60c for 40c each

### Base Ball Bats

D. & M. \$1.50 for.....\$1.00  
D. & M. \$2.25 for.....\$1.50

### Lawn Mowers

Coldwell 18 in. Jewel. Regular Price \$13.50. Clearance price \$8.40  
Coldwell 18 in. Imperial, roller bearing. Regular price \$20.00. Clearance price .....\$15.75  
Coldwell 18 in. Lakewood, ball bearing. Regular price \$14.00. Clearance price .....\$11.25

### Kiddie Kars

Size	Regular Price	Clearance Price
No. 1	\$1.00	\$ .79
No. 2	\$1.50	\$1.20
No. 3	\$1.90	\$1.49
No. 4	\$2.50	\$1.98

### Gas Ranges

20% off on our complete line of Gas Ranges.

## Here You Will Find WHAT YOU NEED FOR YOUR GARDEN AND LAWN:

Seeds, Packet and Bulk.  
Onion Sets and Seed Potatoes.  
Planet, Jr., Wheel Hoes and Seeders.  
Forks, Rakes, Hoes and Spades.  
Fertilizer, Bone Meal and Sheep Manure.  
Pyrox, Lead Arsenate and Bordeaux.  
(Paste and Powder)  
Sprayers, Garden Hose and Reels.

At

**The Old Hardware Corner**  
CHAS. H. SHIVE

Main and State Streets. Phone 3-J. Doylestown, Pa.

go first to the hardware store for his garden tools and then to the grocer for his seeds?

The accompanying advertisement taken from the *Doylestown (Pennsylvania) News* shows how the Charles H. Shive Company has captured the seed business, as well as that of the garden tools.

\* \* \*

## Mile Posts That Point Way to Success.

1. Honesty is the only policy.
2. When you are wrong, admit it!
3. When you are right, fight to the last ditch!
4. Don't talk too much—listen!
5. If you never do any more than you are paid for, you'll never get paid for more than you do!
6. Coöperate!
7. Know what you are talking about!
8. Fight fair!
9. Give service; actions speak louder than words.
10. Make friends!
11. Don't underestimate your competitors!

## LUNCH KIT SPECIAL

Genuine Thermos with 1 Pint Bottle—Regular \$2.25 Value. Special.....\$1.89  
American Kit with 1 Pint Bottle—Regular \$1.50 Value. Special.....\$1.29  
Hoover Sweepers, \$6.25 down and the balance in Small Monthly Payments.

## BOYCE HARDWARE CO.

923-925 MILITARY ST.

PHONES 84-1984

be quoted when making a special offer of this kind. Where a reduction in price is made, it should be clearly stated, as this makes immediate action necessary, in order to take advantage of the offer.

The ad is a typical department store ad. Each separate item offered has its own little section in the ad, so that the reading matter does not present a jumbled and conglomerate mass of type to the reader.

The use of bold face type instead

ever, and undoubtedly served to move the goods and bring in the cash.

\* \* \*

One method of increasing the service to your patrons is to add side lines. By this we do not mean that the hardware man should go in for selling lines which are in no way related to his present stock, unless his business is large enough to warrant the establishment of a department store. There is, how-

# Industry Supplying Current Consumption Well, With No Shortages to Be Made Up.

*Adjustment of Output to Buying Progressing Satisfactorily—Non-Ferrous Metals Quiet—Prices Strengthen.*

**A**LTHOUGH not proceeding at as rapid a pace as during the incipient "boom" of a year ago, business and industry are still running fairly strong and well above normal proportions. This is the tenor of the mid-week reports from the railroads and the steel and automobile industries.

Merchandise is being absorbed in large quantities by consumers, but there is little forward buying and price competition is keen. The railroads reported car loadings at 881,299 for the week ended April 12. This marks an increase of 19,203 over the preceding week, but a decline of 65,972 from a year ago. But most of this decline was due to the reduced coal movement.

General merchandise loadings were even 5 per cent larger than last year. Aside from last year, total loadings ran nearly 23 per cent above the corresponding period in any previous year.

Although the steel industry is steadily curtailing its recent unduly large output, there is no serious falling off in demand. Operations in the Pittsburgh district now are about 75 per cent of capacity, compared with 90 per cent in March.

"Largely the withholding of orders is seen to be due to an expectation that prices will yield further," the *Iron Age* says. "Yet, with consumers keeping their stocks of steel at the lowest point, shipments from the mills appear to be nearly up to the average of 1923, and the volume of construction work and of railroad consumption compares favorably with that of March."

## **Copper.**

According to a survey made by the Copper & Brass Research Association, prices of materials made of copper have advanced less during the past ten years than prices of any

other building material. Sheet copper and copper wire advanced but 4 or 5 per cent during that period. The survey says:

"Records show that the largest volume of building is contracted for and under way during the first three months of the year. So it is only natural that the present impetus will not be maintained during the summer and fall. Normally the early summer sees a recession and the fall a slight increase. In a normal year the first quarter represents about one-third of the yearly total. The principal factors in the unusual activities for 1924 have been the condition of the money market, the large carry-over of projected building from 1923, and the open winter.

"There are indications, however, of a recession in the present boom. Labor and materials have shown a steady advance."

## **Tin.**

Tin has been inactive in the absence of news from London, due to the holidays, but rising sterling exchange rates have increased New York future prices about  $\frac{1}{2}$  cent. It is reported a leading operator in London has regained control of the market and may again resume its bull operations.

## **Lead.**

Lead prices have steadied, following their sharp decline from the March high levels. Business has been done in the open market at 7.75 cents, East St. Louis, and 7.90 cents, New York, for prompt and May shipments. The American Smelting & Refining Company has held its contract price at 8.25 cents. Inquiry has been broader the past few days.

## **Zinc.**

There has been a further upward movement in zinc and 6.15 cents,

East St. Louis, for prime western is generally asked by those producers who are offering anything.

Consuming demand is reported in fair, but not large volume, but the principal cause for the higher figures asked appears to be the policy of curtailment in slab output, brought about by the recent decline to less than cost, the market being still below what is represented to be a remunerative level.

## **Solder.**

Chicago warehouse prices on solder are as follows: Warranted, 50-50, \$31.00; Commercial, 45-55, \$30.25, and Plumbers', \$29.00, all per 100 pounds.

## **Wire and Nails.**

Most makers of wire products at Pittsburgh stand in need of business, but must satisfy themselves with limited orders. In general enough business is on the books to keep mills there operating two or three weeks at 70 to 75 per cent of capacity, but each day brings business equal to shipments. Most incoming orders are for nails, with a fair sprinkling of wire products.

Plain wire still is quoted at 2.75 cents, the same condition applying. For the most part, agricultural buying is disappointing. Cement-coated nails are quoted at 2.50 cents, base Pittsburgh, one inquiry now current for seven or eight carloads having failed to develop anything less.

## **Bolts and Nuts.**

Carload orders are noted in nuts, bolts and rivets, but are scarce. Some less-than-carload business is being transacted and the price situation still is unsettled.

Concessions under the quoted bases appear now and then. On some sizes makers have two or three weeks' work ahead, while on others

they are not even that well fixed. Some rivet makers have obligated their output heavily to railroad car and locomotive builders and consequently are in good shape, while others need business badly and are offering concessions of \$1 or \$2 per ton to get it.

On structural rivets 2.60 cents has appeared, although 2.65 cents to 2.70 cents generally is quoted. Small rivets are quoted generally at 70 and 10 off.

### ***Sheets.***

Cutting of prices at Pittsburgh by various sheetmakers in the past few weeks apparently has not been productive of much tonnage. These mills have gone to 2.75 cents on blue annealed, 3.60 cents on black and 4.75 cents on galvanized. Concessions to these levels, amounting to \$5 per ton, are said to have put prices below production costs in many instances.

The price situation in steel sheets in the Chicago district is much confused by the reaching in of makers in other districts. Reduced prices are not bringing them much business because many consumers had contracted for their second quarter requirements and consumers needing sheets now are buying more sparingly. The leading local maker is well booked for the second quarter and apparently is maintaining the level of 5.00 cents, Pittsburgh, for galvanized, 3.85 cents for black and 3.00 cents for blue annealed. Outside competition is shading these prices \$3 to \$4 a ton.

### ***Tin Plate.***

With the planting season, particularly in Delaware, Maryland, New Jersey, Wisconsin and elsewhere, at least a month behind, activity in the tin plate industry all along the line is being checked. The food packers have stored cans to the limit of their capacity. The canmakers have stored tin plate as well as finished cans to the limit of their storage space, and the tin plate makers likewise have utilized all floor space they have available for tin plate storage purposes. The latter are ahead of their schedules by a few

weeks and continue to operate about 90 per cent. They are shipping at a high rate.

The market price is firm at \$5.50 per base box of 100 pounds.

The falling pig tin market removes the immediate possibility of an advance from that level for the third quarter.

The leading interest has reduced its operating schedules a trifle from the 95 per cent basis of last week.

Some of the oil companies are tentatively inquiring for their third quarter requirements. One has just placed 8,000 base boxes for prompt shipment with a large maker here. Stock plate finds a ready sale at prices around \$5.25, although some

lower levels apply on less desirable seconds. One recent sale from stock list plate involved 15,000 base boxes.

### ***Old Metals.***

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$17.50 to \$18.00; old iron axles, \$25.00 to \$25.50; steel springs, \$18.50 to \$19.00; No. 1 wrought iron, \$12.00 to \$12.50; No. 1 cast, \$17.25 to \$17.75, all per net tons. Prices for non-ferrous metals are quoted as follows, per pounds: Light copper, 9 cents; light brass, 5½ cents; lead, 5½ cents; zinc, 3¾ cents, and cast aluminum, 16½ cents.

## ***Pig Iron Is Still Drifting, Except at Pittsburgh, Where a Modest Gain in Inquiry Is Reported.***

***No. 2 Foundry Iron Is Being Quoted at \$22 at Pittsburgh and Birmingham—Melt Reduced at Chicago.***

**A** GREATER measure of pig iron activity at Pittsburgh is noted this week. One interest reports inquiries received totaled 12,000 tons of various grades.

Merchant producers are holding No. 2 foundry iron at \$22, valley. Steel companies have quoted \$21.50. Resale iron is available at \$21 to \$21.75, valley.

Activity is limited to several small lots. Scrap interests' iron holdings are not pressing the market, they apparently being willing to hold the iron several months for a rise.

Encouragement is taken from the fact there are no cancellations or suspensions, although some consumers are asking producers to ease up on shipments.

The pig iron market at Chicago continues dormant, with few inquiries and those limited to 200 tons. Melters are letting stocks run down, in some cases to a week's supply. The reduced melt is evidenced by a decrease in coke shipments.

Birmingham and Sheffield barge iron also has been hit by the lull.

Northern sellers have been attempting to force the market, and

believe business is on the upturn. They see in prospect thirty to sixty days hence the beginning of a heavy demand.

Northern foundry and malleable iron is \$24, furnace. This price probably could be broken by attractive business, but a test is not in sight. Demand for charcoal iron is usually confined to carloads. No. 3 Iroquois furnace is out for relining, the first drop in merchant production in this district.

Pig iron quotations at Birmingham are slipping as buyers delay purchases. Sales are in small lots for immediate delivery.

The selling interest is a consumer for iron and will have need for considerable tonnage. The larger and more active furnace interests were surprised at this price and said it represented distress iron.

The more active interests still hold their iron at \$23, and one is asking \$23.50. Shipments are steady. More iron is leaving the furnace yards than is being manufactured. There will have to be steady production and delivery at the present rate for four weeks under present contracts.



# Chicago Warehouse Prices on Hardware and Metals.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

## METALS

### PIG IRON.

Chicago Foundry...	24 00
Southern Fdy. No. 2	28 01 to 29 01
Lake Sup. Char-coal	29 04
Malleable	24 00

### FIRST QUALITY BRIGHT TIN PLATES.

IC	14x20 112 sheets	\$12 45
IX	14x20 40-lb.	14 05
INX	14x20 56 sheets	17 57
INXX	14x20	18 12
INXXX	14x20	18 65
IC	20x28 112 sheets	27 50
IX	20x28	29 85
INX	20x28 56 sheets	16 15
INXX	20x28	17 20
INXXX	20x28	18 25

### TERNE PLATES

	Per Box
IC 20x28, 40-lb. 112 sheets	\$25 60
IX 20x28, 40-lb.	28 50
IC 20x28, 30-lb.	21 80
IX 20x28, 30-lb.	24 70
IC 20x28, 25-lb.	20 80
IX 20x28, 25-lb.	23 70
IC 20x28, 20-lb.	18 30
IX 20x28, 20-lb.	21 15
IC 20x28, 15-lb.	17 05
IX 20x28, 15-lb.	15 75
IC 20x28, 8-lb.	14 05

### COKE PLATES.

Cokes, 80 lbs., base, 20x28	\$13 85
Cokes, 90 lbs., base, 20x28	14 10
Cokes, 100 lbs., base, 20x28	14 45
Cokes, 107 lbs., base, IC 20x28	14 85
Cokes, 135 lbs., base, IX 20x28	17 40
Cokes, 155 lbs., base, 56 sheets	9 75
Cokes, 175 lbs., base, 56 sheets	10 65
Cokes, 195 lbs., base, 56 sheets	11 70
Base	per 100 lbs. \$3 50

### ONE PASS COLD ROLLED BLACK.

No. 18-20	per 100 lbs. \$4 50
No. 22-24	per 100 lbs. 4 55
No. 26	per 100 lbs. 4 60
No. 27	per 100 lbs. 4 65
No. 28	per 100 lbs. 4 70
No. 29	per 100 lbs. 4 75

### GALVANIZED.

No. 16	per 100 lbs. \$4 85
No. 18-20	per 100 lbs. 5 00
No. 22-24	per 100 lbs. 5 15
No. 26	per 100 lbs. 5 30
No. 27	per 100 lbs. 5 45
No. 28	per 100 lbs. 5 60
No. 30	per 100 lbs. 6 10

### BAR SOLDER.

Warranted, 50-50	per 100 lbs. 31 00
Commercial, 45-55	per 100 lbs. 30 25
Plumbers	per 100 lbs. 29 00

### ZINC.

In Slabs	6 25
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### SHEET ZINC.

Cask lots, stock, 100 lbs.	11 75
Less than cask lots, 100 lbs.	12 00

### BRASS.

Sheets, Chicago base	19 1/2c
Mill Base	17 1/2c
Tubing, brazed, base	25c
Wire, base	17 1/2c

### COPPER.

Sheets, Chicago base	21c
Mill base	20 1/4c
Tubing, seamless, base	23 1/2c
Wire, No. 9 & 10 B. & S. Ga.	17 1/4c
Wire, No. 11, B. & S. Ga.	17 1/4c

### LEAD.

American Pig	8 25
Bar	9 25
Sheet, Full Coils	per 100 lbs. 13 00
Cut Coils	per 100 lbs. 13 25

### TIN.

Pig Tin	per 100 lbs. 51 00
Bar Tin	per 100 lbs. 52 00

## HARDWARE, SHEET METAL SUPPLIES, WARM AIR FURNACE FITTINGS AND ACCESSORIES.

### ADZES.

Coopers', Barton's	Net
White's	Net

### AMMUNITION.

Shells, Loaded, Peters.	
Loaded with Black Powder	18%
Loaded with Smokeless Powder	18%
Winchester.	
Smokeless Repeater	
Grade	20 & 4%
Smokeless Leader	
Grade	20 & 4%
Black Powder	20 & 4%
U. M. C.	
Nitro Club	20 & 4%
Arrow	20 & 4%
New Club	20 & 4%
Gun Wads—per 1000.	
Winchester 7-8 gauge 10 & 7 1/2	
9-10 gauge 10 & 7 1/2	
11-28 gauge 10 & 7 1/2	

### ASBESTOS.

Paper up to 1/16	6c per lb.
Rollboard	6 1/4c per lb.
Millboard 3/32 to 1/2	6c per lb.
Corrugated Paper (250 sq. ft. to roll)	\$6.00 per roll

### AUGERS.

Boring Machine	40 & 10%
Carpenter's Nut	50%
Hollow.	
Stearns, No. 4, doz.	\$11 50
Post Hole.	
Iwan's Post Hole and Well	35%
Vaughan's, 4 to 9 in.	\$15 60

### AXES.

First Quality, Single Bitted (unhandled), 3 to 4 lb., per doz.	\$14 00
Good Quality, Single Bitted, same weight, per doz.	13 00

### BARS, CROW.

Steel, 4 ft., 10 lb.	\$ 80
Steel, 5 ft., 18 lb.	1 40
Pinch Bars, 5 1/2 ft., 24 lb.	1 60

### BARS, WRECKING.

V. & B. No. 12	\$0 34
V. & B. No. 24	0 43
V. & B. No. 32	0 57
V. & B. No. 30	0 48
V. & B. No. 330	0 63

### BITS.

All Vaughan and Bushnell.	
Screw Driver, No. 30, each	\$ 27
Screw Driver, No. 1, each	16
Reamer, No. 80, each	41
Reamer, No. 100, each	41
Countersink, No. 13, each	20
Countersink, Nos. 14-15, each	27

### BLADES, SAW.

Wood.	
Atkins 30-in.	
Nos. 6 40 26	
\$8 90 \$9 45 \$5 40	

### BLOCKS.

Wooden	45%
Patent	45%

### BLOW TORCHES (See Firepots).

### BOARDS.

Stove.	Per Doz.
Crystal, 33"	\$23 90

Wash.	
No. 760, Banner Globe (single)	per doz. \$5 25
No. 652, Banner Globe (single)	per doz. 6 75
No. 801, Brass King	per doz. 8 25
No. 860, Single—Plain Pump	6 25

## BOLTS.

Carrage.	
Small, roll thread	60 & 10%
Small and Large cut thread	50%

### Machine.

Small, roll thread	60%
Small, cut thread	50 & 10%

### Stove

	70-10%
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### BRACES, RATCHET.

V. & B. No. 444, 8 in.	\$4 54
V. & B. No. 222, 8 in.	3 89
V. & B. No. 111, 8 in.	3 55
V. & B. No. 11, 8 in.	3 02

### BRUSHES.

Hot Air Pipe Cleaning.	
Bristle, with handle, each	\$0 85

### Flue Cleaning.

Steel Only, each	\$1 25
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## BURRS.

Copper Burrs only	40%
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## BUTTS.

Steel, antique copper or dull brass finish—case lots—3 1/2 x 3 1/2—per dozen pairs	\$3 12
4 x 4	4 40

### Heavy Bevel steel inside sets, case lots—

	per dozen sets 7 80
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### Steel bit keyed front door sets, each

	1 90
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### Wrought brass bit keyed front door sets, each

	3 25
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### Cylinder front door sets, each

	7 50
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## CEMENT, FURNACE.

American Seal, 5 lb. cans, net	\$ 45
" 50-lb. cans, net	90
" 25 lb. cans, net	2 00
Asbestos, 5 lb. cans, net	45
Pecora	per 100 lbs. 7 51

## CHAINS.

% in. proof coil chain, per 100 lbs.	\$8 50
American coil chain	40 & 10%

## CHIMNEY TOPS.

Iwan's Complete Rev. & Vent.	30%
Iwan's Iron Mountain only	35%
Standard	30 to 40%

## CHISELS.

Cold.	
V. & B. No. 25, 1/4 in., ea.	\$0 26
V. & B. No. 25, 1/2 in., ea.	41

### Diamond Point.

V. & B. No. 55, 1/4 in.	0 31
V. & B. No. 55, 1/2 in.	0 48

### Firmer Bevelled.

Round Nose.	
V. & B. No. 65, 1/4 in.	0 20
V. & B. No. 65, 1/2 in.	0 40

### Socket Firmer.

Cape.	
V. & B. No. 50, 1/4 in.	0 31
V. & B. No. 50, 1/2 in.	0 57

## CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers	List less 35-40%
Yankee, for Yankee Screw Drivers	\$6 00

## CLAMPS.

Adjustable.	
No. 100, Door (Stearns) doz.	\$22 00

### Carpenter's.

Steel Bar.	List price plus 20%
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### Hose.

Sherman's brass, 3/4-inch per doz.	\$0 48
Double, brass, 3/4-inch, per doz.	1 20

## CLINKER TONGS.

Front Rank, each	\$1 75
Per doz.	18 00

## CLIPS.

Damper.	
Acme, with tail pieces, per doz.	\$1 25
Non Rivet tail pieces, per doz.	35

## COPPERS—Soldering.

Pointed Roofing.	
3 lb. and heavier	per lb. 40c
2 1/2 lb.	45c
2 lb.	48c
1 1/2 lb.	55c
1 lb.	60c

## CORD.

No. 7 Std. per doz. banks.	\$10 75
No. 8 " " " "	12 30

## CORNICE BRAKES.

Chicago Steel Bending.	
Nos. 1 to 6B.	10%

## COUPLING HOSE.

Brass	per doz. \$2 20
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## CUT-OFFS.

Kuehn's Korrekt Kutoffs:	
Galv., plain, round or cor. rd.	
Standard gauge	40%
26 gauge	10%

## DAMPERS.

"Yankee" Hot Air.	
7 inch, each 20c, doz.	\$1 75
8 " 25c, " "	2 40
9 " 30c, " "	2 75
10 " 32c, " "	3 00

## Smoke Pipe.

7 inch, each	\$ 25
8 " "	40
9 " "	50
10 " "	60
12 " "	90

## Reversible Check.

8 inch, each	\$1 50
9 " "	1 70

## DIGGERS.

Post Hole.	
Iwan's Split Handle (Eureka)	
4-ft. Handle, per doz.	\$14 00
7-ft. Handle, per doz.	36 00
Iwan's Hercules pattern, per doz.	14 90

## DRILLS.

V. & B. Star, 12-inch Length.	
1/4, 5/16 and 3/8, each	\$ 25
1/2, each	26
1, each	54
1 1/4, each	81

V. & B. Star, 18-inch Length.	
5/16 and 3/8, each	\$ 33
1/2, each	45
1, each	89
1 1/4, each	1 93

## EAVES TROUGH.

Milcor	
Galv. Crimpedge, crated	75%

## ELBOWS—Conductor Pipe.

Milcor	
Galv., plain or corrugated, round flat.	
Crimp, Std. gauge	65%
26 Gauge	40%
24 Gauge	10%

## Square Corrugated.

Milcor	
Standard gauge	50%
26 gauge	30%

## Portico Elbows.

Standard Gauge Conductor Pipe, plain or corrugated.	
Not nested	70 & 5%
Nested solid	70 & 5%

## ELBOWS—Stove Pipe.

1-piece Corrugated. Uniform.		Doz.
5-inch	.....	\$1 40
6-inch	.....	1 50
7-inch	.....	2 00

## Uniform, Collar Adjustable.

5-inch	Doz.
6-inch	\$2 10
7-inch	2 60

WOOD FACES—50% off list.

## FENCE.

Field Fence	60 1/2%
Lawn	53%

## FILES AND RASPS.

Heller's (American)	60-10%
American	60-10%
Arcade	50%
Black Diamond	40-10-5%
Eagle	50%
Great Western	50%
Kearney & Foot	50%
McClellan	50%
Nicholson	50%
Simonds	60%

## FIRE POTS.

Ashton Mfg. Co.	
Complete line	
Firepots and Torches	52%

## Otto Bernz Co.

No. 1 Furn. Gasolene with large shield, 1 gal.	\$ 6 75
No. B Furn. Kerosene, 1 gal.	15 12
No. 10 Brazier, Kerosene or Gasolene, 10 gals.	47 52
No. 5 Torch, Gasolene or Kerosene, 1 pt.	7 92
No. 83 Torch, Gasolene, 1 quart	5 40
No. 86 Torch, Gasolene, 1 pint	4 05

## Clayton &amp; Lambert's.

East of west boundary line of Province of Manitoba, Canada, No. Dakota, So. Dakota, Nebraska, Kansas, Oklahoma, Amarillo, San Angelo and Laredo, Texas	52%
West of above boundary line	48%

## Geo. W. Diener Mfg. Co.

No. 02 Gasolene Torch, 1 qt.	\$ 5 55
No. 0250, Kerosene or Gasolene Torch, 1 qt.	7 50
No. 10 Tinnern's Furn. Square tank, 1 gal.	12 60
No. 15 Tinnern's Furn. Round tank, 1 gal.	12 00
No. 21 Gas Soldering Furnace	3 60
No. 110 Automatic Gas Soldering Furnace	10 50

## Double Blast Mfg. Co.

Gasolene, Nos. 25 and 35	60%
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## Quick Meal Stove Co.

Vesuvius, F.O.B. St. Louis	30%
(Extra Disc't. for large quantities)	

## Chas. A. Hones, Inc.

Buzzer No. 1	\$ 9 00
" " 2	12 00
" " 22	13 50
" " 42	15 00
" " 43	19 00

## FREEZERS—ICE CREAM.

Peerless and Alaska	
1 quart	\$2 95
2 quart	3 45
3 quart	4 10
White Mountain	
1 quart	\$4 85
2 quart	5 65

## GALVANIZED WARE.

Pails (Competition), 8 qt.	\$1.85
10-qt.	2 10
12-qt.	2 30
14-qt.	2 57
Wash tubs, No. 1	\$6 00
No. 2	6 75
No. 3	8 00

## GARAGE DOOR HARDWARE.

Stanley	All net
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## GAUGES.

Marking, Mortise, etc.	Nets
Wire	
Disston's	25%

## GIMLETS.

Discount	65% and 10%
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## GLASS.

Single Strength, A and B.	
all sizes	83 & 85%
Double Strength, A, all sizes	84%

## GREASE, AXLE.

Frazers	
1-lb. tins, 36 to case, per case	\$ 4 70
3-lb. tins, 24 to case, per case	7 80
5-lb. tins, 12 to case, per case	7 20
10-lb. tins, per dozen	10 40
25-lb. tins, per dozen	13 80
30-lb. tins, per dozen	19 80

## HAMMERS, HANDLED

All V. and B.	Each, net
Blacksmiths' Hand, No. 0, 26-oz.	\$1.00
Engineers' No. 1, 26 oz.	1 00
Farrier's, No. 7, 7-oz.	93
Machinists', No. 1, 7-oz.	78

## Nail.

Vanadium, No. 41, 20-oz. each	1 59
Vanadium, No. 41 1/2, 16-oz. each	1 59
V. & B., No. 11 1/2, 16-oz. each	1 01
Garden City, No. 11 1/2, 16-oz. each	75

## Tinner's Riveting, No. 1, 8-oz., each

Shoe, Steel, No. 1, 18-oz. each	65
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## Tack.

Magnetic, No. 5, 4-oz., each	81
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## HAMMERS, HEAVY.

Farrier's, No. 10, 10-oz.	\$1 01
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## HANDLES.

Axe, Hickory, No. 1, per doz.	4 00
Hickory, No. 2, per doz.	3 00
1st quality, second growth	6 00
Special white, 2nd growth	5 00

## Chisel.

Hickory, Tanged, Firmer assorted	per doz. 55c
Hickory, Socket, Firmer, Assorted	per doz. 70c

## File

per doz.	\$1 20
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## Hammer and Hatchet.

No. 1 per doz.	\$0 90
Second Growth hickory, per doz.	1 50

## Soldering.

Per doz.	\$2 40
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## HANGERS.

Conductor Pipe, Milcor Perfection Wire	25%
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## Eaves Trough.

Steel hangers	30%
Triple Twist wire	10%
Milcor Eclipse Wire	20%
Milcor Triplex Wire	15%
Milcor Milwaukee Extension	15%
Milcor Steel (galv. after forming) List plus	12 1/2%
Milcor Selflock E. T. Wire, List plus	40%

## HASPS.

Hinge, Wrought, with staples.	Net
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## HATCHETS.

V. & B. Supersteel, Each	
Broad, No. 1, 24-oz.	\$1 43
Half, No. 1, 15-oz.	1 25
Half, No. 3, 27-oz.	1 37
Claw, No. 1, 19-oz.	1 31
Flooring, No. 1, 20 oz.	1 43
Shingling, No. 1, 17-oz.	1 20
Lathing, No. 1, 14-oz.	1 20
Lathing, No. 2, 17-oz.	1 25

## Vanadium Steel.

Half, No. 62, 22-oz.	\$1 82
Underhill Pattern Lathing, 9 row, 19-oz.	2 29

## HINGES.

Heavy Strap, in Bundles, 4 inch, dozen prs.	\$1 26
5 " " " "	1 74
6 " " " "	3 12
8 " " " "	3 54
Extra Heavy T in Bundles, 4 inch, dozen prs.	\$1 90
5 " " " "	2 01
6 " " " "	2 52
8 " " " "	4 30

## HOES.

Garden	net
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## HOOKS.

Box, V. and B. No. 9, each	\$0 26
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## Conductor.

Milcor "Direct Drive" Wrought Iron for wood or brick	15%
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## Cotton.

V. and B. No. 8, each	24
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## Hay.

V. and B. No. 1, each	26
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## Bar Meat.

V. and B. No. 26, 3/4", each	09
V. and B. No. 28, 1/2", each	16

## Screw Meat.

V. and B. No. 2, per gro.	6 50
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## Butchers' "S."

V. and B. No. 6 each	08
V. and B. No. 8, each	11

## HOSE.

Per Ft.	
1/2-in. 2 ply molded	12c
1/2-in. cord	8 1/2 c to 10c
1/2-in. wrapped	14c

## HUMIDIFIERS.

## "Front-Rank," Automatic.

In single lots	50%
In lots of 10 or more	50-5%
In lots of 25 or more	50-10%
Vapor pans, etc., each	50%

## IRONS.

Sad, Genuine Mrs. Potts, nickel plated, per set	\$1 55
Asbestos No. 70, per set	2 10
Asbestos No. 100, per set	2 30
E. C. Stearns', No. OA Corner, doz. sets	\$2 50
No. OB " "	2 75

## KNIVES.

Butcher, Beechwood Handles, 6-inch blade	25%
Beechwood Handle, 7-inch blade	25%
Beechwood Handles, 3-inch blade	25%
Cooper's Hoop	25%

## Drawing.

Standard	25%
Adjustable	25%
Barton's Carpenters'	25%

## Hay.

Iwan's Solid Socket	25%
Heath's	25%
Iwan's Sickle Edge	25%
Iwan's Imp'd Serrated	25%

## Hedge.

Challenge	25%
Disston's No. 1	25%

## Putty.

Common	25%
Lander's	25%

## Scraping.

Beech Handles	25%
Lander's	25%

## KNOBS.

Door, Mineral	per doz. \$2 00
Porcelain	" 2 00
Jet	" 2 00

## LADDERS.

Common, per ft.	28c
Common, with Shelf, add 10c	
IXL	34c
Challenge, 6 to 9 ft.	55c
10 to 16 ft.	60c
Kant-Break, per lineal ft.	75c

## LANTERNS.

Per doz.	
Monarch tin, hot blast	\$ 8 25
Dietz No. 2 cold blast	13 00
Best tubular	8 25
Competition lanterns No. 6 tubular	6 90

## LAWN MOWERS.

12-inch	\$5 20
16-inch	5 85

## Ball Bearing.

4 blade, adjustable bearing.	
14"	\$5 20
16"	7 80

## LEATHER BELTING.

From No. 1 Oak Tanned Butts, Extra heavy, 18-oz.	35%
Heavy, 16-oz.	40%
Medium, 14 1/2-oz.	40%
Light, 13-oz.	50%

## LEATHER LACING.

Cut, strictly No. 1	45%
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## LEVELS.

Disston, No. 28 Asst.	\$22 05
" No. 18, 20 in., each	1 33
" No. 22, 24 in., each	2 40
" Shafting, 6 in.	19 80
" " 6 in. gr. glass	24 20
" No. 1 Asst.	5 75
" No. 2 Asst.	12 40
" 24-26 in., each	1 02
" 28-30 in., each	1 00

## LIFTERS.

## Stove Cover.

Coppered	per gro. \$6 00
Alaska	" 4 75

## LOCKS.

## Barn Door.

No. 60 Stearns', per doz.	\$11 00
No. 80 " "	20 00

## MALLET.

## Carpenters'.

Fibre Head No. 2, per doz.	\$12 00
" No. 3, " "	15 50
" No. 3 1/2, " "	20 50
Round Hickory, per doz.	\$3.00—5 00

## Tinnern's.

Hickory	per doz. \$2 25
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## MATS.

## Door.

National Rigid	5 & 10 & 5%
Acme Steel Flexible	50%

## MITRES.

## Galvanized steel mitres, and caps, end pieces, outlets

Milcor	30%
Galv. one piece stamped	40%

## MOPS.

## Cotton, Star (Cut Ends).

Pounds 12' 15' 18' 24'-3-oz.	
Per doz. \$4 00 4 35 5 50 7 00	
Enterprise	16 1/2%
Parker	50 & 5%

## NAILS.

## Cut Steel

per doz.	\$4 70
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## Cut Iron

per doz.	4 70
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## Wire.

Common	3 80
Cement Coated	3 25

## NETTING, POULTRY.

Galvanized before weaving	45-10%
Galvanized after weaving	45%

## NIPPERS.

## Nail Cutting.

V. & B. No. 30	73c
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## Double Duty.

V. & B. No. 60	76c
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## Hoof.

Heller's	40 & 10%
V. & B. No. 52, each	\$2 25

## NOZZLES.

## Hose.

Diamond	per doz. \$5 75
Magic	" 9 50

## OILERS.

## Chase Pattern.

Brass and Copper	10%
Zinc Plated	40 & 5%

## Railroad.

Brass	20 & 5%
Coppered	50 & 5%

## Steel.

Copper Plated	70 & 5%
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## OPENERS.

## Delmonico

per doz.	\$1 30
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## Never Slip

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<b>PAISLS.</b>		<b>POKERS, STOVE.</b>		<b>SAWS.</b>		<b>Rivet.</b>	
<b>Cream.</b>		Wrt Steel, str't or bent.		<b>Butchers'.</b>		Farmers' .....\$0 15	
14-qt., with gauge.		.....per doz. \$0 75		Atkins No. 2, 14-in. ....\$12 75		Tinnners' 3-4 ..... 0 40	
18-qt., without gauge.		Nickel Plated, coil		" No. 2, 18-in. .... 14 30		00-0 ..... 0 60	
20-qt., without gauge.		handles ..... 1 10		" No. 7, 16-in. .... 15 85		<b>Saw.</b>	
.....per doz. 11 00				" No. 2, 22-in. .... 15 92		Atkins No. 10.....per doz.\$2 80	
.....per doz. 11 75				" No. 7, 20-in. .... 18 05		No. 12..... " 6 20	
<b>Sap.</b>		<b>POKERS, FURNACE.</b>		" No. 7, 24-in. .... 20 20			
10-qt., IC Tin....per doz. \$4 00		Each .....\$0 50		" No. 7, 28-in. .... 22 35			
12- " " " " " 5 50				<b>Compass.</b>		<b>SHEARS.</b>	
<b>Stock.</b>		<b>PULLEYS.</b>		Atkins No. 2, 10-in. ....\$ 5 45		Nickel Plated, Straight, 6" \$12 90	
Galv. qts. 14 16 18 20		Furnace Tackle....per doz. \$0 60		" No. 10, 10-in. .... 5 60		" " " " " 7" 14 85	
Per doz. \$9 75 10 75 12 75 14 50		per gross ..... 6 00		" Blades, No. 2, 10-in. 3 25		Japanned, Straight.....6" 11 00	
<b>Water.</b>		" Screw (en-		" No. 2, 10-in. 3 30		" " " " " 7" 12 40	
Galvanized qts. 10 12 14		cased)....per doz. \$0 85		<b>Cross-Cut.</b>		" " " " " 8" 13 80	
Per doz. ....\$5 75 6 50 7 25		<b>Ventilating Register.</b>		Atkins No. 221, 4-ft. ....\$3 03		<b>SHEARS, TINNERS' &amp; MACHINISTS'.</b>	
<b>PASTE.</b>		Per gross .....\$9 00		" No. 221, 6-ft. .... 4 45		Viking .....\$22 00	
<b>Asbestos Dry Paste:</b>		Small, per pair ..... 0 30		" No. 221, 8-ft. .... 6 07		<b>Lennox Throatless.</b>	
200-lb. barrel.....\$15 00		Large, per pair ..... 0 50		<b>Hand.</b>		No. 18 .....35%	
100-lb. barrel..... 8 00		<b>PUNCHES.</b>		Copper Burrs only.....30%		Shear blades .....10%	
35-lb. pail ..... 3 25		<b>Machine.</b>		No. 96, 20 in. .... 21 70		(f. o. b. Marshalltown, Iowa.)	
10-lb. bag ..... 1 00		Each		<b>Hand and Rip.</b>		<b>Peerless Steel Squaring.</b>	
5-lb. bag ..... 55		V. & B. No. 11-13, 1 1/2 x 6. \$0 19		Atkins No. 54, 20-in. ....\$19 50		<b>Foot Power.</b>	
2 1/2-lb. cartons ..... 30		V. & B. No. 90, 3/4 x 9. .... 27		" No. 54, 26-in. .... 24 40		No. 1-30", 18 ga. cap. ....15%	
		V. & B. No. 10, 3/4 x 10. .... 29		" No. 53, 16-in. .... 18 10		No. 2-36", 18 ga. cap. ....15%	
		V. & B. No. 1-6, 1/2 x 6. .... 12		" No. 53, 20-in. .... 22 90		No. 4-52", 18 ga. cap. ....15%	
		<b>Center.</b>		" No. 53, 24-in. .... 26 60		No. 10-120", 22 ga. cap. ....15%	
		V. & B. No. 50, 3/4 x 4. ....\$0 14		" No. 53, 28-in. .... 31 45		No. 4A-52", 16 ga. cap. ....15%	
		V. & B. No. 101-103. ....\$0 24		<b>Keyhole.</b>		<b>Cast Iron Foot Power.</b>	
		V. & B. No. 25, ass't. .... 3 80		Atkins No. 1 complete....\$3 10		No. 01, 30", 18 ga. cap. ....15%	
		V. & B. No. 25, ass't. .... 3 80		" No. 2 complete.... 3 70		<b>Power Driven.</b>	
		<b>Samson Line.</b>		<b>Miter Box.</b>		(No. 100 Series, 2 Shaft Drive.)	
		No. 1 Hand		Atkins No. 1, 4x20. ....\$32 65		No. 142-42", 18 ga. cap. ....15%	
		Doz. lots or		" No. 1, 5x22. .... 38 00		(No. 200 Series, 2 Shaft Under-	
		less ..... 40%		" No. 1, 6x22. .... 42 20		neath Drive.)	
		No. 2 Hand		<b>Pruning.</b>		No. 242-42", 14 ga. cap. ....15%	
		3 doz. lots		Atkins No. 20, 12-in. ....\$ 8 45		(No. 300 Series, 3 Shaft Under-	
		...Less 40 & 5%		" No. 10, 16-in. .... 18 15		neath Drive.)	
		No. 4 Hand		<b>Wood.</b>		No. 342-42", 10 ga. cap. ....15%	
		6 doz. lots or		Atkins No. 202. ....\$ 7 19		No. 372-72", 10 ga. cap. .... 15%	
		more—Less 50%		" No. 318. .... 8 75		(No. 500 Series, 3 Shaft Under-	
		No. 3 Bench		" No. 906. .... 15 50		neath Drive.)	
		Less than doz.		" No. 1509. .... 16 56		No. 596-96", 10 ga. cap. ....15%	
		lots...Less 25%		<b>SCRAPERS.</b>		No. 600 Series, 3 Shaft Under-	
		Doz. lots or		Box.		neath Drive.)	
		more—Less 40%		No. 6, six blade each. ....25c		No. 6120-120", 3/16" cap. ....15%	
		No. 3 Bench		<b>Hog.</b>		<b>SHOES.</b>	
		6 doz. lots		No. 6, each .....25c		<b>Milcor.</b>	
		or more,		<b>Floor (Stearns).</b>		Galv. Std. Gauge, Plain or	
		...Less 40 & 10%		No. 10, each .....\$11 50		corg. round flat crimp. ....65%	
		<b>Extra Punches and Dies for</b>		<b>SCREEN DOOR HINGES</b>		26 gauge round flat crimp. ....40%	
		<b>Samson:</b>		Cast Iron .....gross \$13 00		24 gauge round flat crimp. ....10%	
		No. 1 Hand		Steel ..... 9 50		Conductor .....65%	
		Less than doz.		<b>SCREWS.</b>		<b>SHOVELS AND SPADES.</b>	
		lots...Less 25%		Wood.		<b>Coal.</b>	
		Doz. lots		F. H. Bright .....80%		Hubbard's.	
		...Less 33 1/2%		R. H. Blued .....78%		No. A B C D	
		No. 2 Hand		F. H. Jap'd .....74%		1 \$16 00 15 10 14 45 13 70	
		3 doz. lots		F. H. Brass .....76%		2 16 35 15 60 14 85 14 10	
		...Less 40%		R. H. Brass .....74%		3 16 75 16 00 16 25 14 40	
		No. 4 Hand		<b>Sheet Metal.</b>		4 17 10 16 35 16 60 14 85	
		6 doz. lots		No. 7, 1/2 x 1/4, per gross....\$0 55		<b>Post Drains &amp; Ditching.</b>	
		or more,		No. 10, 3/4 x 3/16, per gross 75		Hubbard's.	
		...Less 40 & 10%		No. 14, 3/8 x 1/4, per gross... 90		No. A B C	
		<b>PUTTY.</b>		<b>SCREW DRIVERS.</b>		14" .....\$17 15 \$16 40 \$15 65	
		Commercial Putty, 100-lb.		Uncle Sam Standard Head.		16" ..... 17 50 16 75 16 00	
		kits .....\$3 55		2 inches, each .....\$ 45		18" ..... 17 85 17 10 16 85	
		<b>QUADRANTS.</b>		5 inches, each ..... 52		20" ..... 18 20 17 45 16 70	
		Malleable Iron Damper.....10%		8 inches, each ..... 68		22" ..... 18 55 17 80 17 05	
		<b>FLOOR REGISTERS AND</b>		12 inches, each ..... 1 02		<b>Alaska Steel.</b>	
		<b>BORDERS.</b>		<b>Uncle Sam Insulated Head.</b>		D-Handle .....per doz. \$3 50	
		Cast Iron .....25%		3 inches, each .....\$ 49		Long Handle ..... " 3 00	
		Steel and Semi-Steel.....40%		5 inches, etch ..... 57		<b>SIFTERS.</b>	
		Baseboard .....40%		8 inches, each ..... 76		Genuine Hunters, doz.....\$2 50	
		Adjustable Ceiling		12 inches, each ..... 1 14		<b>SKATES.</b>	
		Ventilators .....40%		<b>SETS.</b>		Ice, Men's and Boys'. Per Pair	
		<b>Register Faces—Cast and Steel.</b>		Nail.		Key Clamp—rocker—bright	
		Japanned, Bronzed and Plated.		V. & B.		finish .....\$ 76	
		4x6 to 14x14 .....40%		No. 100, in cardboard		Key Clamp—rocker—nickel	
		Large Register Faces—Cast.		boxes .....doz. \$1 55		finish ..... 1 10	
		14x14 to 38x42 .....60%		No. 100, in wooden boxes.		Key Clamp—rocker — pol-	
		Large Register Faces—Steel.		Doz. 1 58		steel ..... 1 36	
		14x14 to 38x42 .....65%		No. 50, assorted.....doz. 39		Key Clamp—rocker — pol-	
		<b>ROOFING.</b>		No. 5, in cardboard boxes.		Skate outfits ..... 4 75	
		Per Square		doz. 1 25		<b>Women's and Girls'.</b>	
		Best grade, slate surf. prep'd\$2 00		No. 5, in wooden boxes.		1/2" Key Clamp—rocker....\$1 31	
		Best talc surfaced..... 2 35		doz. 1 30		" " " " " " " " " 1 38	
		Medium talc surfaced..... 1 65				Ice Skate outfit..... 5 00	
		Light talc surfaced..... 1 05				<b>Roller.</b>	
		Red Rosin Sheeting, per ton.70 00				Ball Bearing—Boys' .....\$1 45	
						Ball Bearing—Girls' ..... 1 55	